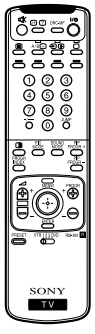
Self Diagnosis Supported model

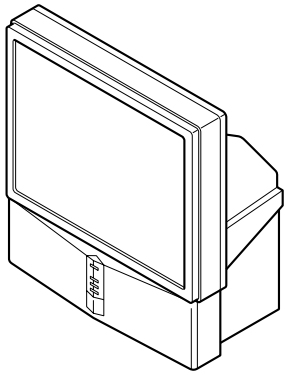
SERVICE MANUAL RG-3 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-ES43HK1	RM-961	HK	SCC-P45B-A
KP-ES43ME1	RM-961	ME	SCC-P46B-A
KP-ES43MN1	RM-961	GE	SCC-P44D-A
KP-ES43SN1	RM-961	AUS	SCC-P47B-A
KP-ES48HK1	RM-961	HK	SCC-P45A-A
KP-ES48ME1	RM-961	ME	SCC-P46A-A
KP-ES48MN1	RM-961	GE	SCC-P44A-A
KP-ES48SN1	RM-961	AUS	SCC-P47A-A

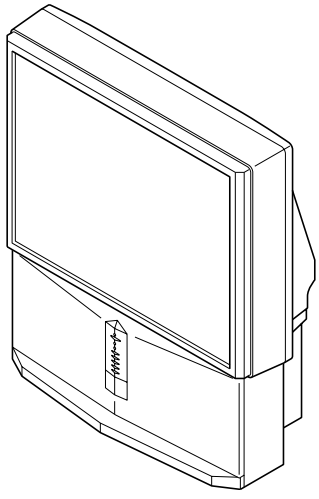
MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-ES53HK1	RM-961	HK	SCC-P45C-A
KP-ES53ME1	RM-961	ME	SCC-P46C-A
KP-ES53MN1	RM-961	GE	SCC-P44B-A
KP-ES53SN1	RM-961	AUS	SCC-P47C-A
KP-ES61HK1	RM-961	HK	SCC-P45D-A
KP-ES61ME1	RM-961	ME	SCC-P46D-A
KP-ES61MN1	RM-961	GE	SCC-P44C-A
KP-ES61SN1	RM-961	AUS	SCC-P47D-A



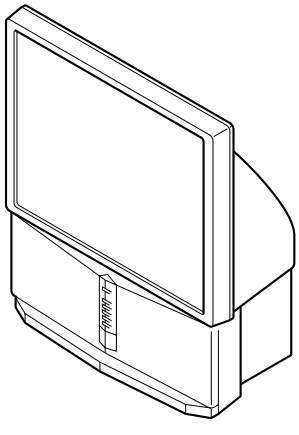
RM-961



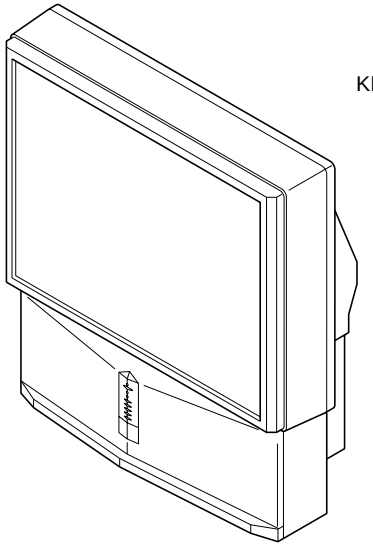
KP-ES43HK1/ME1/MN1/SN1



KP-ES53HK1/ME1/MN1/SN1



KP-ES48HK1/ME1/MN1/SN1



KP-ES61HK1/ME1/MN1/SN1

∗ Please file according to model size. ...□

43 48 53 61

PROJECTION TV

SONY®

SPECIFICATIONS

	KP-ES61MN1/ KP-ES61HK1/ KP-ES61ME1/ KP-ES61SN1	KP-ES53MN1/ KP-ES53HK1/ KP-ES53ME1/ KP-ES53SN1	KP-ES48MN1/ KP-ES48HK1/ KP-ES48ME1/ KP-ES48SN1	KP-ES43MN1/ KP-ES43HK1/ KP-ES43ME1/ KP-ES43SN1
Projection system	3 picture tubes, 3 lenses, horizontal inline system			
Picture tube	7 inch high-brightnes monochorome tubes (6.3 raster size), with optical coupling and liquidcooling system			
Projection lenses	High performance, large-diameter highbrid lens F1.0			
Screen size	61 inches	53 inches	48 inches	43 inches
Television system	B/G, I, D/K, M			
Color system	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58			
Stereo/Bilingual system	NICAM Stereo/Bilingual B/G, I; A2 Stereo/Bilingual (German) B/G			
Channel coverage				
B/G	VHF : E2 to E12 / UHF : E21 to E69 / CATV : S01 to S03, S1 to S41			
I	UHF : B21 to B68 / CATV : S01 to S03, S1 to S41			
D/K	VHF : C1 to C12, R1 to R12 / UHF : C13 to C57, R21 to R60 / CATV : S01 to S03, S1 to S41, Z1 to Z39			
M	VHF : A2 to A13 / UHF : A14 to A79/ CATV : A-8 to A-2, A to W+4, W+6 to W+84			
(Antenna)	75-ohm external terminal			
Audio output (Speaker)	13W + 13W, (10% distortion)			
Number of terminal				
(Video)	Input: 4 Output: 1	Phono jacks; 1 Vp-p, 75 ohms		
(Audio)	Input: 4 Output: 1	Phono jacks; 500 mVrms		
(S Video)	Input: 2	Y: 1 Vp-p, 75 ohms, unbalanced, sync negative C: 0.286 Vp-p, 75 ohms		
(Component Video)	Input: 1	Phono jacks Y: 1 Vp-p, 75 ohms, sync negative C_B/B-Y: 0.7 Vp-p, 75 ohms C_R/R-Y: 0.7 Vp-p, 75 ohms Audio: 500 mVrms		
	Output: 1	Phono jack; 500 mVrms		
(Headphones)	Output: 1	Stereo minijack		
Dimensions (w/h/d, mm)	1372 × 1542 × 661.5	1218 × 1423 × 623	1091 × 1336 × 580	966 × 1078 × 532
Mass (kg)	90	76	68	61

Power requirements
110 V – 240 V (For KP-ES61MN1/KP-ES53MN1/KP-ES48MN1/KP-ES43MN1/KP-ES61ME1/KP-ES53ME1/KP-ES48ME1/KP-ES43ME1)
220 V – 240 V (For KP-ES61HK1/KP-ES53HK1/KP-ES48HK1/KP-ES43HK1/KP-ES61SN1/KP-ES53SN1/KP-ES48SN1/KP-ES43SN1)

Power consumption (W)
270 W (For KP-ES61MN1/KP-ES53MN1/KP-ES48MN1/KP-ES43MN1/KP-ES61ME1/KP-ES53ME1/KP-ES48ME1/KP-ES43ME1)
255 W (For KP-ES61HK1/KP-ES53HK1/KP-ES48HK1/KP-ES43HK1/KP-ES61SN1/KP-ES53SN1/KP-ES48SN1/KP-ES43SN1)

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF HTE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

Section	Title	Page
1.	**SELF DIAGNOSIS FUNCTION**	
1-1.	Diagnostic Test Indicators	5
1-2.	Display of STANDBY/TIMER Light Flash Count	6
1-3.	Stopping the STANDBY/TIMER Flash	6
1-4.	Self-Diagnostic Screen Display	7
1-5.	Handling of Self-Diagnostic Screen Display	7
1-6.	Self-Diagnostic Circuit	8
2.	**GENERAL**	9
3.	**DISASSEMBLY**	
3-1.	Rear Board Removal	33
3-2.	Main Bracket Block Removal	34
3-3.	Service Position	34
3-4.	Control Panel Block and Resistor Assembly (Focus Pack) Removal	35
3-5.	Beznet Block Removal	36
3-6.	Chassis Block Removal	37
3-7.	Terminal Board Removal	38
3-8.	BD, DS, D Boards Removal	38
3-9.	G, G1 Board Removal	39
3-10.	J1, B3, E, M1 Boards Removal	39
3-11.	A1 Board Removal	40
3-12.	High-Voltage Cable Removal and Installation	40
3-13.	Picture Tube Removal	40
4.	**SET-UP ADJUSTMENTS**	
4-1.	Screen Voltage Adjustment (Rough Alignment)	41
4-2.	Screen (G2) Adjustment	41
4-3.	Focus Rough Adjustment	41
4-4.	Deflection Yoke Tilt Adjustment	41
4-5.	2-Pole Magnet Adjustment	42
4-6.	4-Pole Magnet Adjustment	42
4-7.	Green, Red and Blue Focus Adjustment	
4-7-1.	Green, Red and Blue Lens Focus Adjustment	42
4-7-2.	Green, Red and Blue Electrical Focus Adjustment	42
5.	**SAFETY RELATED ADJUSTMENT**	
5-1.	HV Hold-Down Adjustment	43
6.	**ELECTRICAL ADJUSTMENTS**	
6-1.	Adjustments with Commander	
6-1-1.	How to Select Each Mode	44
6-1-2.	How to Enter Service Mode	45
6-1-3.	Method of Cancellation from Service Mode	45
6-1-4.	How to Adjustments	45
6-1-5.	How to Write the Data	45
6-1-6.	Memory Write Confirmation Method	45
6-2.	Service List	46
6-3.	Picture Quality Adjustment	
6-3-1.	Preparation	60
6-3-2.	NTSC Video Input	60
6-3-3.	NTSC RF Input	61
6-3-4.	PAL Video Input	61
6-3-5.	PAL RF Input	62
6-4.	Color Offset (53, 61 inch model only)	
6-4-1.	50 Hz (PAL) TV Mode	62
6-4-2.	50 Hz (PAL) Video Mode	62
6-4-3.	60 Hz (NTSC) TV Mode	62
6-4-4.	60 Hz (NTSC) Video Mode	62
6-5.	Registration Adjustment	
6-5-1.	Setup for Adjustment	63
6-5-2.	Method of Main Deflection Adjustment	63
6-5-3.	Operation Method for Projector Engine (PJE) Mode	64
6-5-4.	Method of Projector Engine Adjustment (Sub Deflection Adjustment)	65
6-5-5.	Deflection Adjustment	67
6-6.	Auto Convergence Setting	73
6-7.	White Balance Adjustment	73
6-8.	Auto Convergence Error Code List	74

Section	Title	Page
7. DIAGRAMS		
7-1.	Block Diagrams	75
7-2.	Frame Schematic Diagram (1) (KP-ES43)	103
	Frame Schematic Diagram (2) (KP-ES48/53/61)	106
7-3.	Circuit Boards Location	109
7-4.	Schematic Diagrams and Printed Wiring Boards	109
(1)	Schematic Diagram of J1 (1/2) Board	112
(2)	Schematic Diagram of J1 (2/2) Board	115
(3)	Schematic Diagram of A1 Board	118
(4)	Schematic Diagram of B3 (1/5) Board	124
(5)	Schematic Diagram of B3 (2/5) Board	127
(6)	Schematic Diagram of B3 (3/5) Board	130
(7)	Schematic Diagram of B3 (4/5) Board	133
(8)	Schematic Diagram of B3 (5/5) Board	135
(9)	Schematic Diagram of E Board	137
(10)	Schematic Diagram of M1 Board	140
(11)	Schematic Diagrams of H1, H2 Boards (KP-ES43)	143
(12)	Schematic Diagrams of H1, H2 and H3 Boards (KP-ES48/53/61)	145
(13)	Schematic Diagram of DS Board	147
(14)	Schematic Diagram of D Board	151
(15)	Schematic Diagram of BD (1/2) Board	154
(16)	Schematic Diagram of BD (2/2) Board	157
(17)	Schematic Diagrams of CR, CG, CB, ZR, ZG and ZB Boards	163
(18)	Schematic Diagram of G Board (AUS/HK)	166
(19)	Schematic Diagram of G1 Board (GE/ME)	169
7-5.	Semiconductors	175
7-6.	IC Block Diagrams	178
8. EXPLODED VIEWS		
8-1.	Screen and Cover Block (KP-ES43)	181
8-2.	Control Panel and Cabinet Block (KP-ES43)	182
8-3.	Screen and Cover Block (KP-ES48)	183
8-4.	Control Panel and Cabinet Block (KP-ES48)	184
8-5.	Screen and Cover Block (KP-ES53)	185
8-6.	Control Panel and Cabinet Block (KP-ES53)	186
8-7.	Screen and Cover Block (KP-ES61)	187
8-8.	Control Panel and Cabinet Block (KP-ES61)	188
8-9.	Main Bracket Block	189
8-10.	Picture Tube Block	190
9. ELECTRICAL PARTS LIST		191

SECTION 1
SELF DIAGNOSIS FUNCTION

The unit in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1-1. DIAGNOSTIC TEST INDICATORS

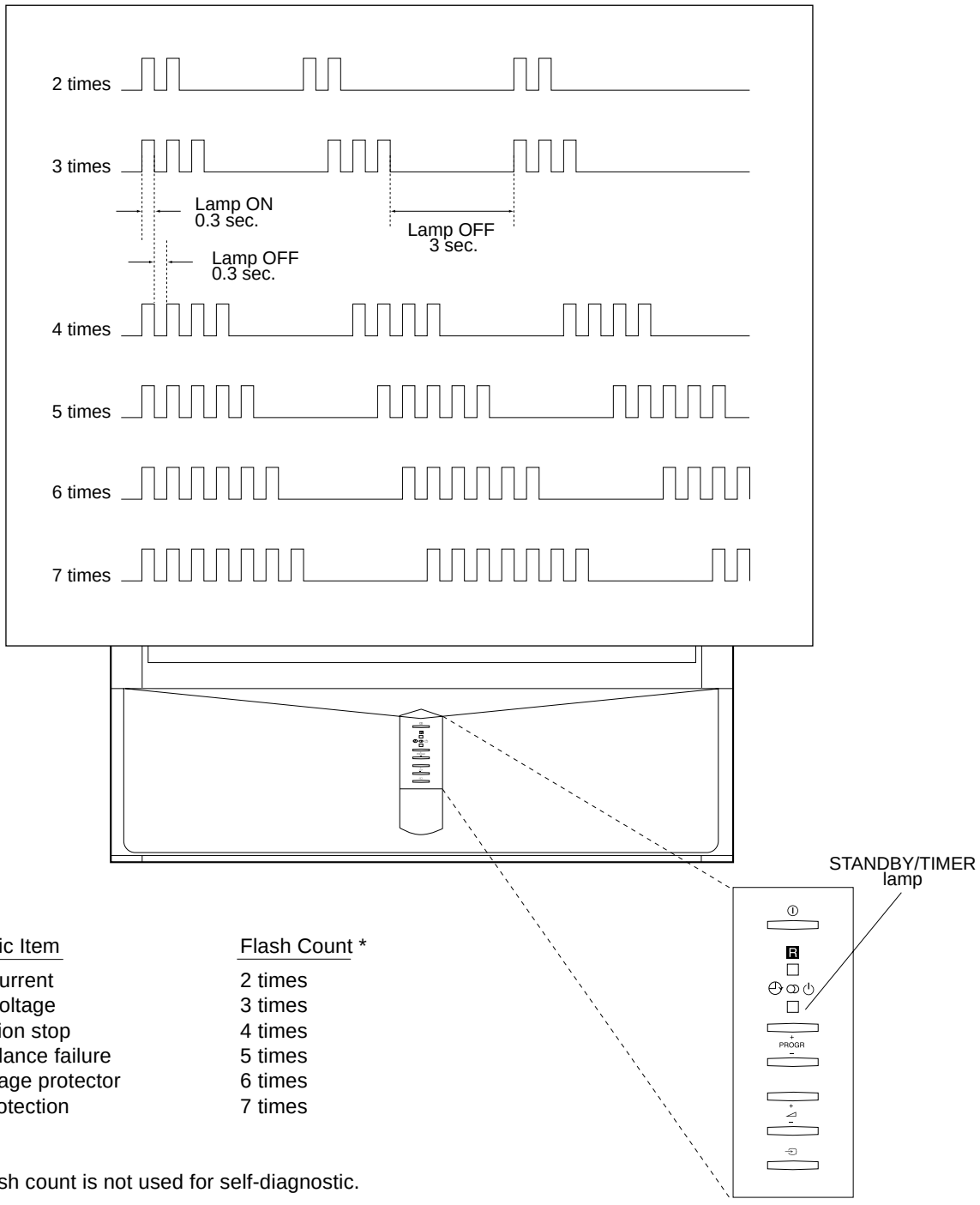
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/ Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	_____	• Power cord is not plugged in. • Fuse (F6001) is burned out. (G, G1 board)	• Power does not come on. • No power is supplied to the PJ. • AC power supply is faulty.
• +B overcurrent (OCP)	2 times	002:000 or 002:001 ~ 255	• H. OUT Q5104 is shorted. • H. LIN Q5105 is shorted. (D board)	• Power does not come on. • Load on power line is shorted.
• +B overvoltage (OVP)	3 times	003:000 or 003:001 ~ 255	• IC6002 faulty. • 10.5 V is not supplied. (G, G1 board)	• Power does not come on.
• Vertical deflection failure	4 times	004:000 or 004:001 ~ 255	• V. OUT IC5302 faulty. • R5340 open • R5341 open (D board)	• Vertical deflection pulse is stopped. • Vertical size is too small. • Vertical deflection stopped.
• White balance failure (no PICTURE)	5 times	005:000 or 005:001 ~ 255	• G2 is improperly adjusted. (Note 1) • CRT problem. • Video OUT IC7101 (CR board), IC7201 (CG board), IC7301 (CB board) are faulty. • IC8306 (J1 board) and IC4301 (E board) are faulty. • No connection E board to CR board.	• No raster is generated. • CRT cathode current detection reference pulse output is small.
• High Voltage failure	6 times	006:000 or 006:001 ~ 255	• IC6301 (G, G1 bard) faulty.	• +135 V is too high.
• Audio Protection	7 times	007:000 or 007:001 ~ 255	• Power supply fails. • IC1101 (A1 board) faulty.	• There is picture but speaker does not release sound.
• Micro reset	_____	101:000 or 101:001 ~ 255	• Discharge CRT (CR, CG, CB boards) • Static discharge • External noise	• Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

Note 1 : Refer to screen (G2) adjustment in section 4-2 of this manual.

1-2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



Diagnostic Item	Flash Count *
+B overcurrent	2 times
+B overvoltage	3 times
V deflection stop	4 times
White balance failure	5 times
High voltage protector	6 times
Audio Protection	7 times

* One flash count is not used for self-diagnostic.

1-3. STOPPING THE STANDBY/TIMER FLASH

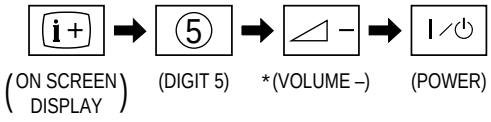
Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

1-4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure for confirmation on the screen:

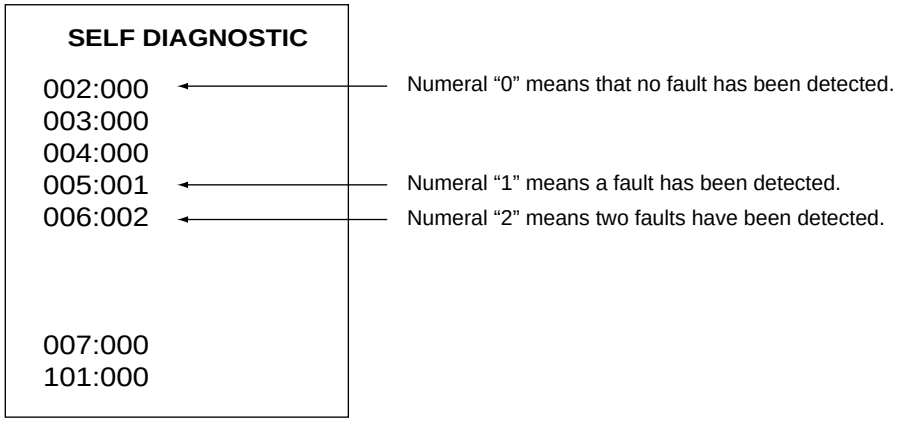
[To Bring Up Screen Test]

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:



* : Note that this differs from entering the service mode (volume +)

Self-Diagnosis screen display



1-5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

[Clearing the result display]

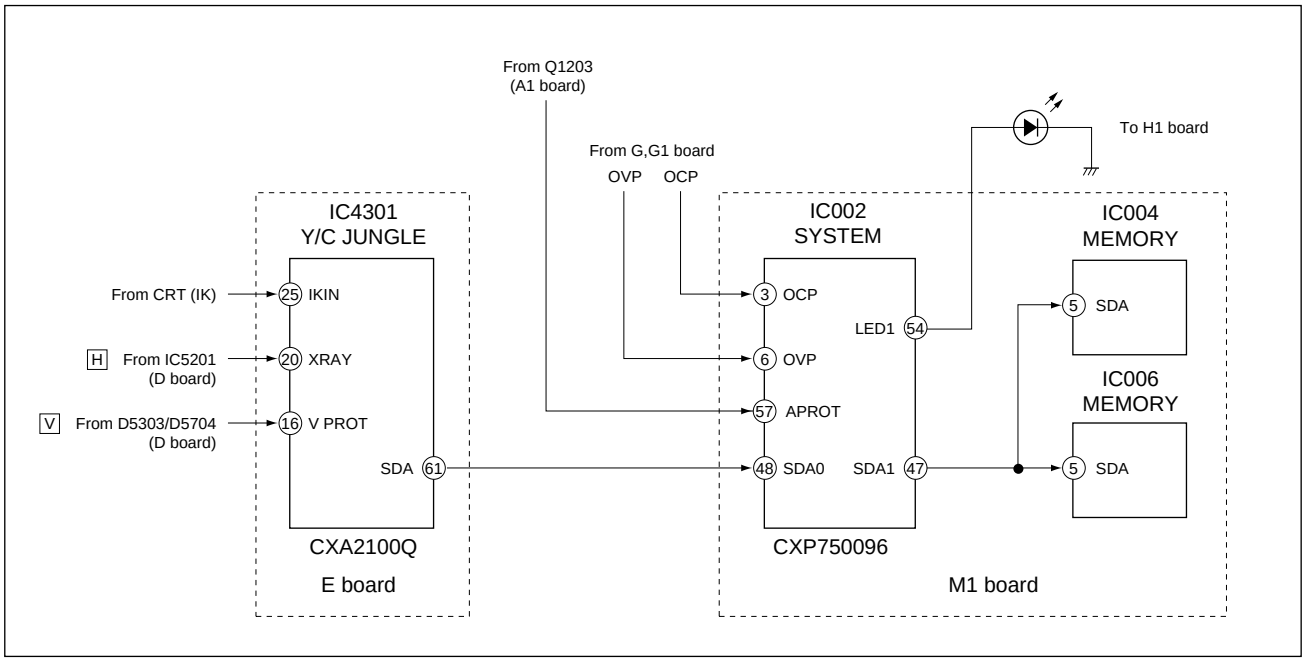
To clear the result display to “0”, press button on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Press “⑧” button
(It will indicate “CLEAR” on the screen.)
➡
Press “⓪” button
(The “CLEAR” display change to red color.)

[Quitting Self-diagnostic screen]

To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

1-6. SELF-DIAGNOSTIC CIRCUIT



+B overcurrent (OCP)	Occurs when an overcurrent on the +B (135 V) line is detected by Q6303. If Q6303 go to ON, the voltage to pin 3 of IC002 go to UP. The unit will automatically turn off.
+B overvoltage (OVP)	Occurs when an overvoltage on the +B (135 V) line is detected by D6318. If D6318 go to ON, then voltage to pin 6 of IC002 go to UP. The unit will automatically turn off.
Vertical deflection failure	Occurs when an absence of the vertical deflection pulse is detected by Q5302, Q5303, and D5303. Shut down the power supply.
White balance failure	If the RGB levels do not balance or become low level within 5 seconds. This error will be detected by IC4301. TV will stay on, but there will be no picture.
High voltage protector of Horizontal Deflection	Occurs when an overvoltage of horizontal pulse is detected by D5115 and IC5201. If the voltage of pin 1 of IC5201 goes to High, the voltage to pin 20 of IC4301 go to UP. The unit will automatically turn off.
Audio Protector	If the Audio out lines become DC.This error will be detected by Q1202, Q1204 and Q1203. The unit will automatically turn off.

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

SECTION 2
GENERAL

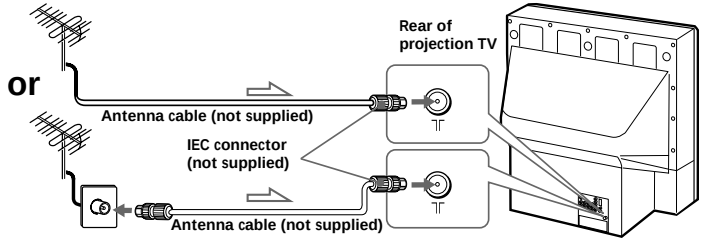
Using Your New Projection TV

Getting Started

Step 1

Connect the antenna

If you wish to connect a VCR, see the "Connecting a VCR" diagram below.



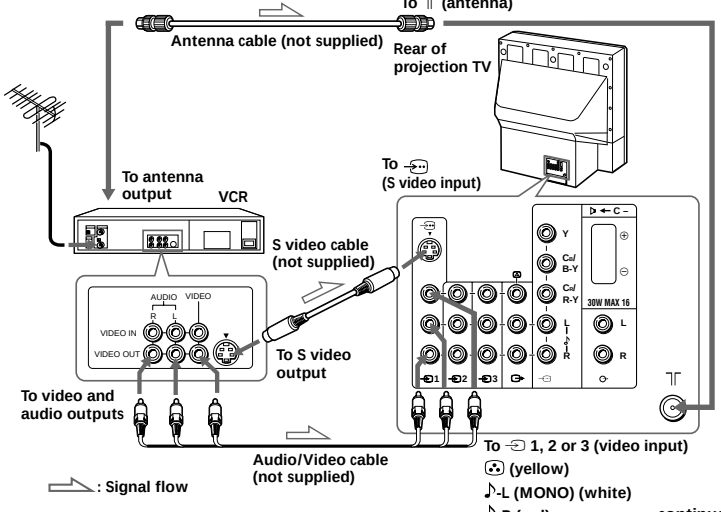
: Signal flow

CAUTION

Do not connect the power cord until all other connections are complete; otherwise, a minimal current leakage through the antenna and/or other terminals to the ground could occur.

Connecting a VCR

To play a video tape, press ⊖ (see page 14).



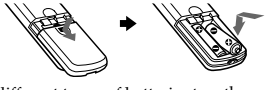
continued

Notes

- If you connect a monaural VCR, connect the yellow plug to (the yellow jack) and the black plug to ♪-L (MONO) (the white jack).
- If you connect a VCR to the ⅂ (antenna) terminal, preset the signal output from the VCR to the program number 0 on the projection TV.
- When both the ⊖ (S video input) and ⊖ 1 (video input) are connected, the ⊖ (S video input) is automatically selected. To view the video input to ⊖ 1 (video input), disconnect the S video cable.

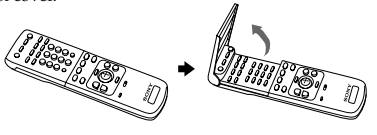
Step 2

Insert the batteries into the remote



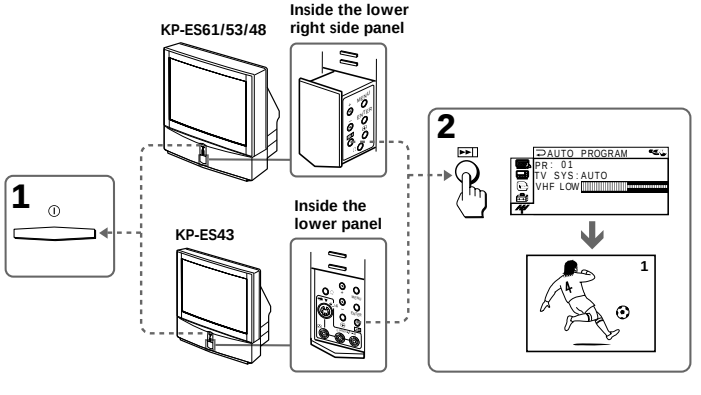
Notes

- Do not use old batteries or different types of batteries together.
- To operate some of the functions of your projection TV, you may have to open the remote control cover.



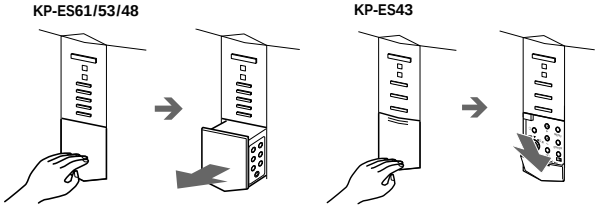
Step 3

Preset the channels automatically



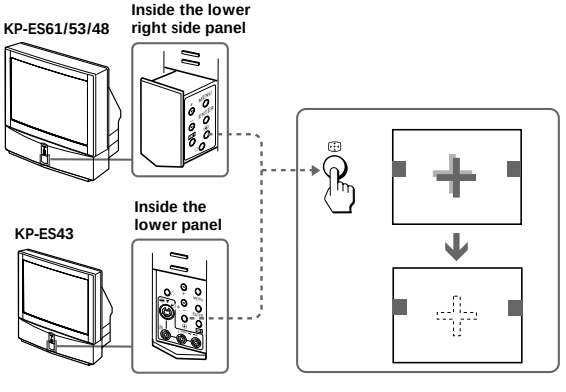
Notes

- To stop the automatic channel presetting, press MENU twice.
- If your projection TV has preset an unwanted channel or cannot preset a particular channel, then preset your projection TV manually (see page 44).
- To open the lower panel of your projection TV, push on it, then it will open.



Step 4

Adjusting the convergence automatically



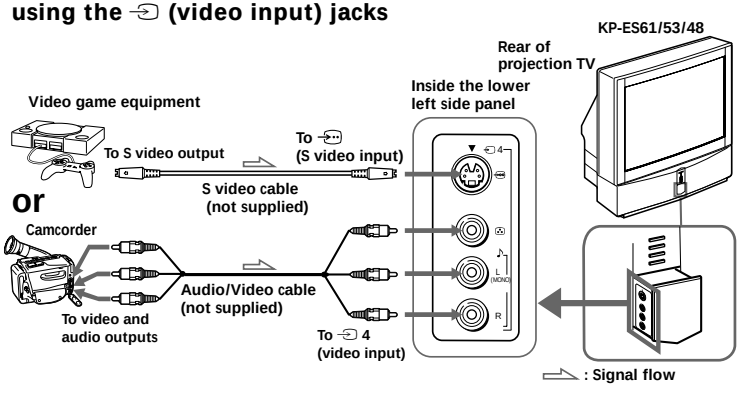
Note

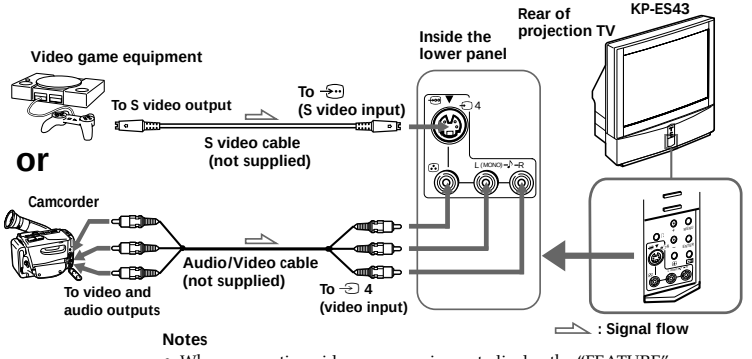
- Adjust convergence about 20 – 30 minutes after the projection TV is first turned on.
  The Digital Quick Focus feature allows you to adjust the convergence automatically.

Connecting optional components

You can connect optional audio/video components, such as a VCR, multi disc player, camcorder, video game, or stereo system. To watch and operate the connected equipment, see pages 14 and 28.

Connecting a camcorder/video game equipment using the ⇨ (video input) jacks

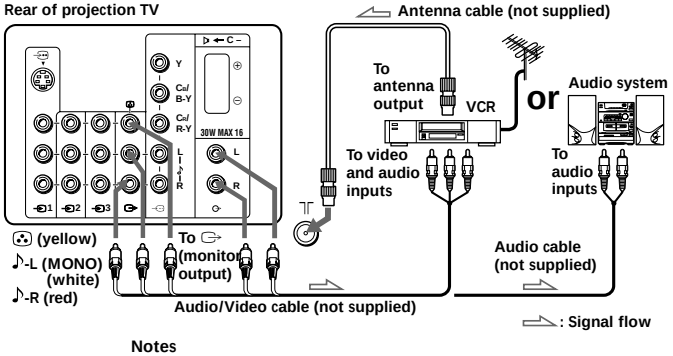




Notes

- When connecting video game equipment, display the "FEATURE" menu and select "ON" for "GAME MODE" to adjust the picture setting that is suitable for video games (see page 39).
- You can also connect video equipment to the ⇨ 1, 2, or 3 (video input) jacks at the rear of your projection TV.
- When both the ⇨ (S video input) and ⇨ 4 (video input) are connected, the ⇨ (S video input) is automatically selected. ℧ view the video input to ⇨ 4 (video input), disconnect the S video cable.

Connecting audio/video equipment using the ⇨ (monitor output) jacks



Notes

- If you select "DVD" on your TV screen, no signal will be output at the ⇨ (monitor output) jacks (see page 14).
- When connecting the audio cable to the ⇨, you can adjust the volume with ◿ +/–.

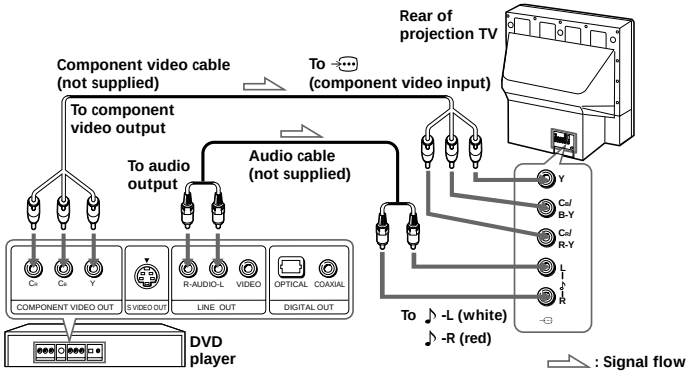
continued

Connecting a DVD player to ⇨ (component video input)

1 Using an audio cable, connect R and L under ⇨ (component video input) on your projection TV to the LINE OUT, AUDIO R and L output connectors on your DVD player.

2 Using a component video cable, connect Y, C_B/B-Y, and C_R/R-Y under ⇨ (component video input) on your projection TV to the COMPONENT VIDEO OUT Y, C_B, and C_R output connectors on your DVD player.

3 Press ⇨ on the remote or the projection TV until "DVD" appears on the screen.



Notes

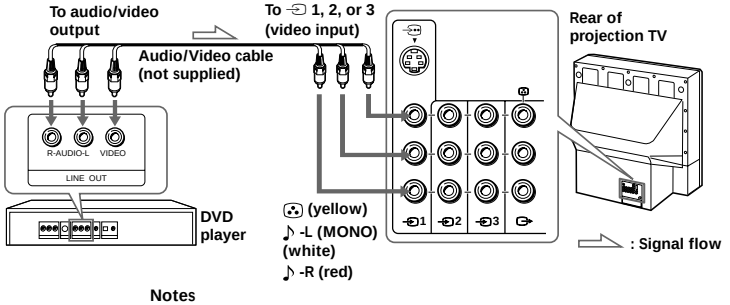
- Some DVD player terminals may be labeled differently:

Connect	To (on the DVD player)
Y (green)	Y
C_B/B-Y (blue)	C_b, B-Y or P_B
C_R/R-Y (red)	C_r, R-Y or P_R

- When connecting to ⇨ (component video input) on your projection TV, you must connect Y, C_B, and C_R to receive the video signals, and at least connect L and R to receive analog audio signals.

Connecting a DVD player to ⇨ (video input)

Connect ⇨ 1, 2, or 3 (video input) ♪/📀 (audio/video) connectors on your projection TV to LINE OUT on your DVD player.

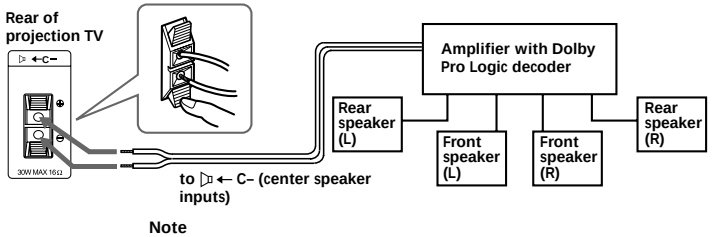


Notes

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust the sharpness ("SHARP") under "PERSONAL ADJUST" in the "PICTURE MODE" menu (see page 34).
- Connect your DVD player directly to your projection TV. Connecting the DVD player through other video equipment will cause unwanted picture noise.

Connecting an amplifier with Dolby* Pro Logic decoder to ▷ ← C– (center speaker input)

Connect the speaker terminals on your amplifier to ▷ ← C– on your projection TV.



Note

- When making connection to ▷ ← C– on your projection TV set "SPEAKER: CENTER IN" in the "A/V CONTROL" menu. (see page 33)

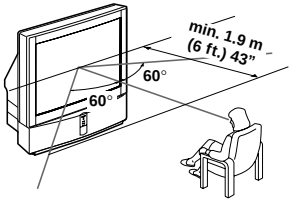
* Manufactured under license from Dolby Laboratories Licensing Corporation.
DOLBY, the double-D symbol ◻◻ and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

Installing the projection TV

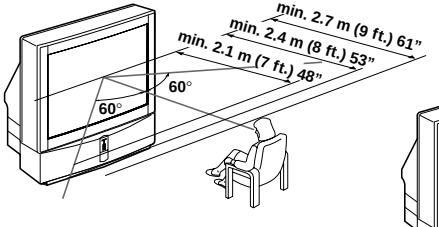
For the best picture quality, install the projection TV within the areas below.

Optimum viewing area (Horizontal)

KP-ES43

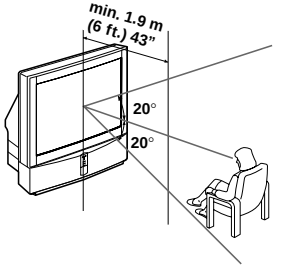


KP-ES61/53/48

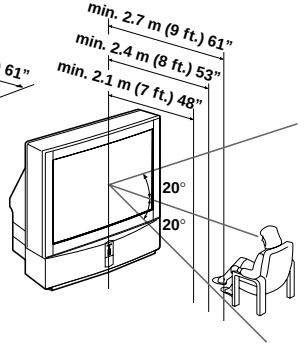


Optimum viewing area (Vertical)

KP-ES43

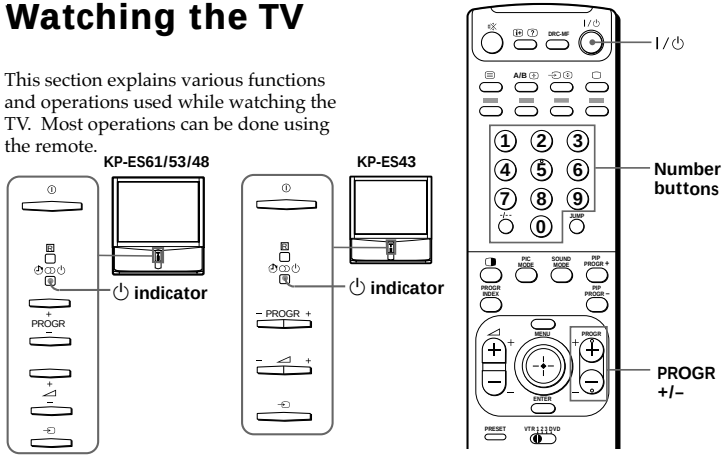


KP-ES61/53/48



Watching the TV

This section explains various functions and operations used while watching the TV. Most operations can be done using the remote.

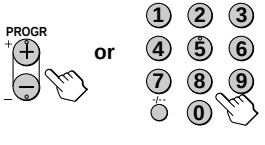


1 **Press ⏻ to turn on the projection TV.**

When the projection TV is in standby mode (the ⏻ indicator on the projection TV is lit red), press I/⏻ on the remote.

2 **Press PROGR +/– or the number buttons to select the TV channel.**

For double digit numbers, press -/--, then the number (e.g., for 25, press -/--, then 2 and 5).



Note

- When you turn on the projection TV, either the program number or video mode is displayed for approximately 40 seconds. The ECO MODE (ECO) icon will also appear if "ECO MODE " in the "FEATURE" menu is set "ON" (see page 39).

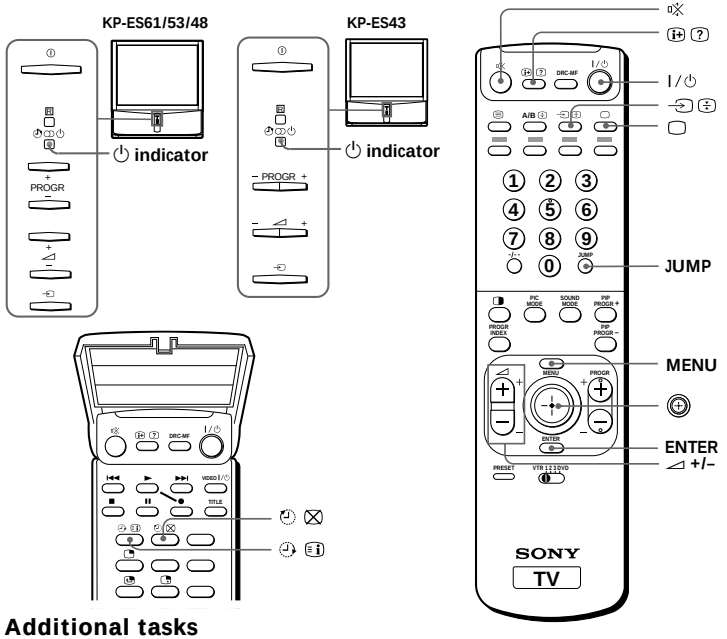
To select a TV program quickly

(1) Press and hold PROGR +/–.
(2) Release PROGR +/– when the desired program number appears.

Note

- When you select a TV program quickly, the picture may be disrupted. This does not indicate a malfunction.

continued



Additional tasks

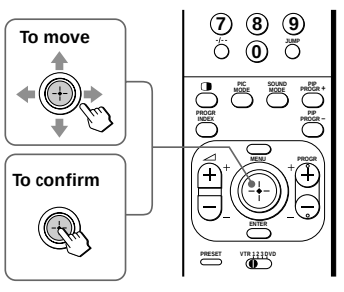
To	Press
Turn off temporarily	I/⏻. The ⏻ indicator on the projection TV lights up red.
Turn off completely	⏻ on the projection TV.
Adjust the volume	+/–.
Mute the sound	.
Watch the video input (VCR, camcorder, etc.)	(or on the projection TV) to select "VIDEO 1", "VIDEO 2", "VIDEO 3", "VIDEO 4" or "DVD". To return to the TV screen, press (or on the projection TV).
Jump back to the previous channel	JUMP.
Display the on-screen information*	.

* Some picture/sound settings, and either the program number or video mode are displayed. The on-screen display for the picture/sound settings disappears after about 3 seconds.

Using the Remote Control Button Joystick (⊕)

You can select the menu item on the screen by moving ⊕ up, down, left or right (see page 32).

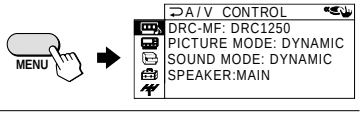
To confirm a selected item, press ⊕. You can also press ENTER on the remote to confirm a selected item.



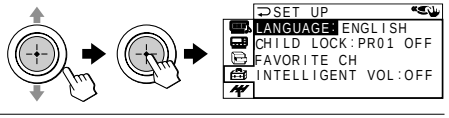
Changing the menu language

You can change the menu language as well as the on-screen language. For details on how to use the menu, see "Introducing the menu system" on page 30.

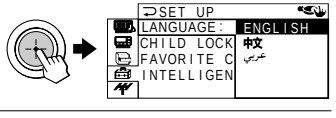
1 Press MENU.



2 Move ⊕ up or down to select 🧰, then press ⊕.



3 Make sure "LANGUAGE" is selected then press ⊕.



4 Move ⊕ up or down to select the desired language (e.g., "**中文**"), then press ⊕.

The selected menu language appears.

To return to the normal screen

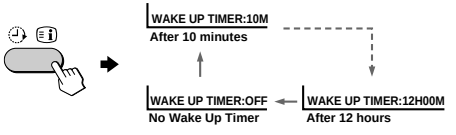
Press MENU.

continued

Setting the Wake Up timer

1 Press 🕘 until the desired period of time appears.

The Wake Up timer starts immediately after you have set it.



2 Select the TV channel or video mode you want to wake up to.

3 Press I/⏻, or set the Sleep timer if you want the projection TV to turn off automatically.

The 🕘 indicator on the projection TV lights up orange.

To cancel the Wake Up timer

Press 🕘 until "WAKE UP TIMER: OFF" appears, or turn the projection TV off.

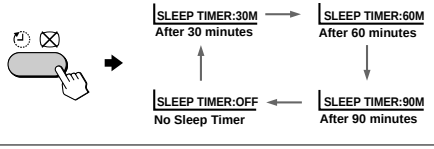
Note

- If no buttons or controls are pressed for more than two hours after the projection TV is turned on using the Wake Up timer, the projection TV automatically goes into standby mode. To resume watching the TV, press any button or control on the projection TV or the remote.

Setting the Sleep timer

Press 🕘 until the desired period of time appears.

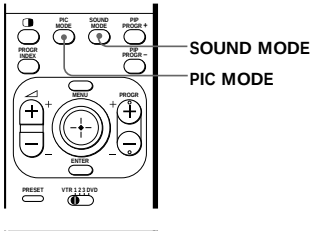
The Sleep timer starts immediately after you have set it.



To cancel the Sleep timer

Press 🕘 until "SLEEP TIMER: OFF" appears, or turn the projection TV off.

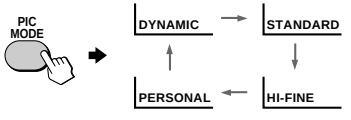
Selecting the picture and sound modes



You can select picture and sound modes and adjust the setting to your preference in the "PERSONAL" option.

Selecting the picture mode

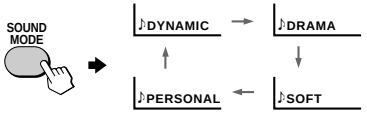
Press PIC MODE repeatedly until the desired picture mode is selected.



Select	To
"DYNAMIC"	receive high contrast pictures.
"STANDARD"	receive normal pictures.
"HI-FINE"	receive higher resolution pictures with mild contrast.
"PERSONAL"	receive the last adjusted picture setting from the "ADJUST" option in the "A/V CONTROL" menu (see page 34).

Selecting the sound mode

Press SOUND MODE repeatedly until the desired sound mode is selected.



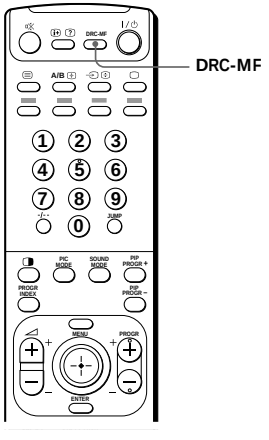
Select	To
"DYNAMIC"	listen to dynamic and clear sound that emphasizes both the low and high tones.
"DRAMA"	listen to sound that emphasizes voice and high tones.
"SOFT"	receive soft sound.
"PERSONAL"	receive the last adjusted sound setting from the "ADJUST" option in the "A/V CONTROL" menu (see page 34).

Tip

- You can also set the picture and sound modes using the menu (see "Changing the "A/V CONTROL" setting" on page 33).

Viewing higher quality pictures

— "DRC-MF"



The Digital Reality Creation-Multi Function (DRC-MF) feature allows you to enjoy higher quality pictures on your projection TV. You can select "DRC1250" to watch super real (higher resolution) pictures, or "DRC100" to reduce flicker if necessary.

Press DRC-MF repeatedly until you receive the desired picture quality.

Select	To
"DRC1250"	select higher resolution pictures.
"DRC100"	reduce flicker on the screen.

Tip

- When the broadcast signal is weak, you may see some dots or noise on the TV screen. To reduce this interference, display the "A/V CONTROL" menu and select "ADJUST" in "PICTURE MODE", then adjust "SHARP" to reduce the sharpness (see page 34).

Note

- The DRC-MF mode is not selectable when using the "PROGRAM INDEX" or "FAVORITE CH" feature, or when the "GAME MODE", Picture-In-Picture ("PIP"), or "TWIN" mode is turned "ON".

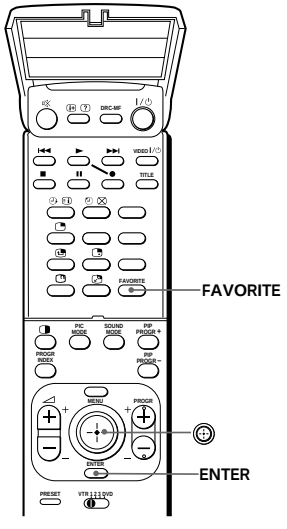
The DRC-MF logo (DRC-MF Digital Reality Creation) and "DRC-MF" are trademarks of Sony Corporation.

Viewing your favorite channels

— "FAVORITE CH"

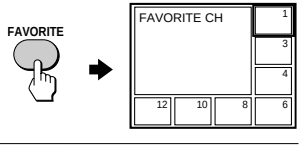
You can display seven favorite channels for quick and easy selection.

The last seven channels selected with the number buttons are displayed in "AUTO" mode. You can set up your own favorite channels in "MANUAL" mode under the "FAVORITE CH" menu (see "Changing the favorite channel setting" on page 42).

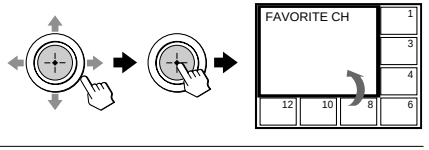


Selecting a favorite channel

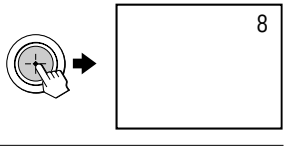
1 Press FAVORITE.



2 Move ⊕ up, down, left or right to select the desired channel (e.g. PR 8), then press ⊕.



3 Press ⊕ again.



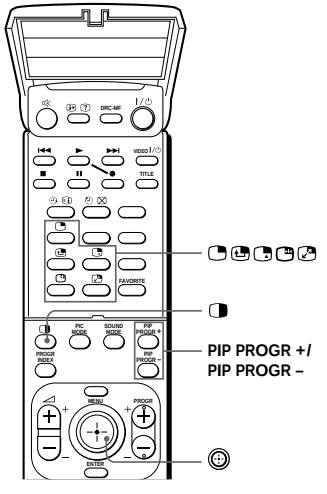
Note

- When you use your projection TV for the first time, seven preset channels appear.

Watching two programs at the same time

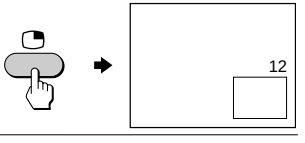
— "PIP", "TWIN"

With the Picture-in-Picture (PIP) or TWIN pictures features, you can display a different TV program or video within or beside the main picture.



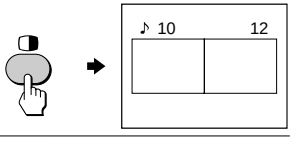
Displaying the PIP screen

Press ◔.



Displaying TWIN pictures

Press ◑.



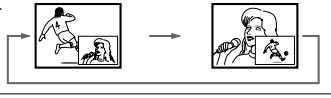
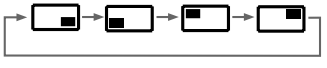
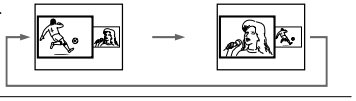
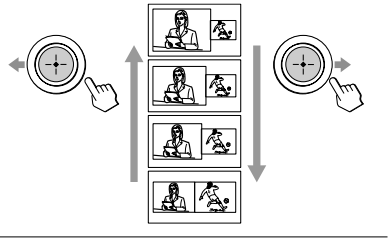
To return to the normal screen

Press ◔ (when in the PIP screen) or ◑ (when in the TWIN picture screen).

Tip

- You can also display the PIP screen or TWIN pictures using the menu (see "Changing the MULTI PICTURE setting" on page 36).

Additional PIP/TWIN pictures tasks

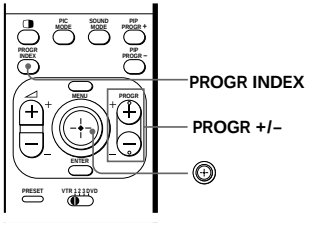
To	Press/Move
change a TV program in the PIP screen or in the right TWIN picture	Press PIP PROGR + or PIP PROGR –. For a video input, press .
swap pictures between the main and PIP screens	Press . 
freeze the PIP screen	Press . To unfreeze the screen, press the button again.
change the position of the PIP screen	Press . 
swap the right and left pictures of the TWIN pictures	Press . 
change the screen size of the TWIN pictures	Move left to increase the left screen size. Move right to increase the right screen size. 

Notes

- The button does not function in the TWIN pictures mode.
- When you display a video input on the PIP screen at a faster/slower speed, the picture may be disrupted depending on the VCR type.
- If you display different color systems on the main screen and the PIP screen, the size of the PIP screen may be different and the PIP picture may be disrupted. This does not indicate a malfunction of the projection TV.
- In the TWIN picture screen, you can only operate and hear the sound of the main left screen (♪ appears on the screen).
- When the button is pressed, the TV screen flickers or goes blank for about one second before the TWIN pictures appear. This does not indicate a malfunction of the projection TV.

Displaying multiple programs

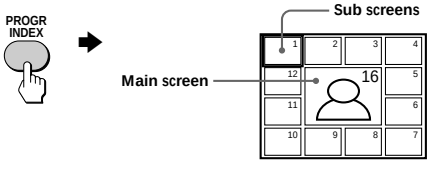
— "PROGRAM INDEX"



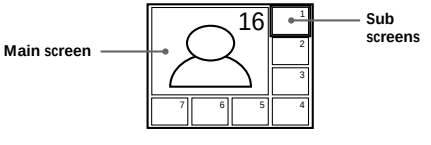
The PROGRAM INDEX feature displays all of the preset TV programs on twelve or seven sub screens for direct selection.

Press PROGR INDEX.

The first twelve preset programs appear one by one, clockwise from the upper left corner.



When the number of the preset TV programs is less than eight, the first seven preset programs appear one by one, clockwise from the upper right corner.



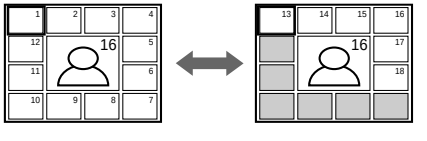
Tip

- When you press the PROGR INDEX button in the TWIN pictures mode, the left picture appears as the main screen of the PROGRAM INDEX mode.

To view the next or the previous twelve preset programs

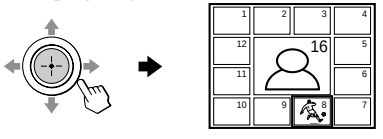
This works only when the number of the preset TV programs is more than twelve.

Press PROGR +/– on the remote or the projection TV.

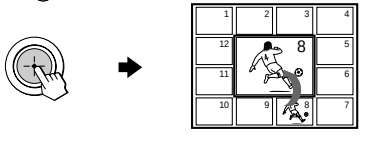


To select the desired program directly from the sub screens

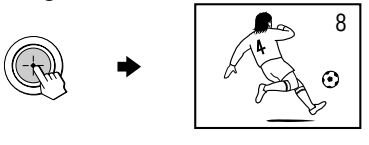
1 Move ⊕ up, down, left or right to move the frame to the screen of the program you want to watch.



2 Press ⊕.



3 Press ⊕ again.



Tip

- Pressing the number buttons directly displays the program.

To return to the normal screen

Press PROGR INDEX again, or:

1 Select "PROGRAM INDEX" from the "MULTI PICTURE" menu.
2 Press ⊕.

Tip

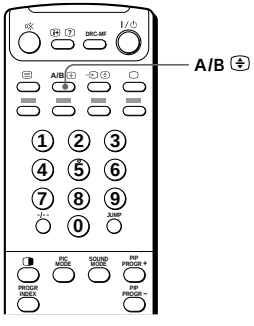
- You can also display multiple programs using the menu (see "Changing the MULTI PICTURE setting" on page 36).

Note

- When displaying multiple programs, only the sound of the main screen is heard.

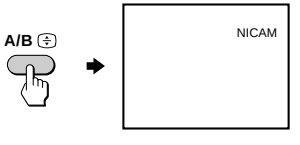
Enjoying stereo or bilingual programs

You can enjoy stereo sound or bilingual programs of NICAM and A2 (German) stereo systems.



Press A/B repeatedly until you receive the sound you want.

The on-screen display changes to show the selected sound and the ▢▢ indicator on the projection TV lights up red.



When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	NICAM (Stereo sound) → MONO (Regular sound)
NICAM bilingual	NICAM MAIN (Main sound) → NICAM SUB (Sub sound) → MONO (Regular sound)
NICAM monaural	NICAM MAIN (Main sound) → MONO (Regular sound)

When receiving an A2 (German) program

Broadcasting	On-screen display (Selected sound)
A2 (German) stereo	MONO (Regular sound) → STEREO (Stereo sound)
A2 (German) bilingual	MAIN (Main sound) → SUB (Sub sound)

Receiving area for NICAM and A2 (German) programs

System	Receiving area
NICAM	Hong Kong, Singapore, New Zealand, Malaysia, Thailand, etc.
A2 (German)	Australia, Malaysia, Thailand, etc.

Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select "MONO". The sound becomes monaural, but the noise is reduced.
- Before receiving a NICAM stereo program in China, please check the NICAM broadcast condition at your area. When receiving a NICAM stereo program, the receiving conditions might vary depending on area. In addition, different strength of the NICAM broadcast signal might affect the receiving quality.

If the sound is distorted or noisy when receiving a monaural program through the ⅂ (antenna) terminal

Press A/B repeatedly until "MONO" appears on the screen.

To cancel the monaural sound setting, press A/B again until "AUTO" appears on the screen.

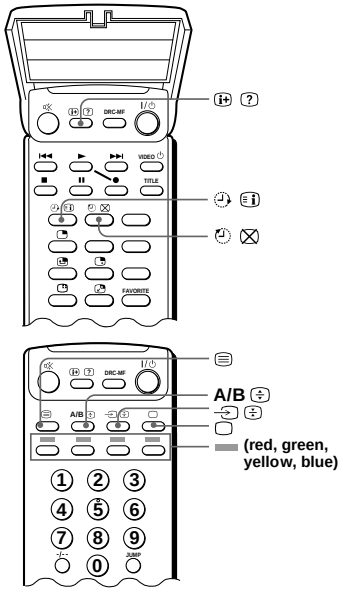
MONO → AUTO

Notes

- The "MONO" or "AUTO" setting is memorized for each program position.
- You cannot receive a stereo broadcast signal when the projection TV is in the "MONO" setting. Normally, set the projection TV to "AUTO".

Viewing Teletext

Some TV stations broadcast an information service called Teletext which allows you to receive various information, such as stock market reports and news.

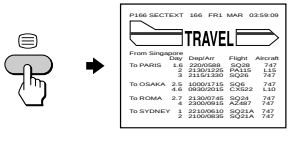


Displaying Teletext

1 Select a TV channel that carries the Teletext broadcast you want to watch.

2 Press ▤ to display the text.

A Teletext page (normally the index page) is displayed. If there is no Teletext broadcast, "100?" is displayed at the top left corner of the screen after approximately 10 seconds.



To turn off Teletext

Press ▢.

Additional Teletext tasks

To	Do this
display a Teletext page on the TV picture	Press ☰. Each time you press ☰, the screen changes as follows: Teletext → Teletext and TV → TV.
check the contents of a Teletext service	Press ☰i. An overview of the Teletext contents, including page numbers, appears on the screen.
select a Teletext page	Press the number buttons to enter the three-digit page number of the desired Teletext page.* If you make a mistake, reenter the correct page number. To access the next or previous page, press PROGR +/–.
hold (pause) a Teletext page (stop the page from scrolling)	Press ⏸ to display the symbol "⏸" at the top left corner of the screen. To resume normal Teletext viewing, press ⏸ or ☰.
reveal concealed information (e.g., an answer to a quiz)	Press ?. To conceal the information, press the button again.
enlarge the Teletext display	Press ⇕. Each time you press ⇕, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.
stand by for a Teletext page while watching a TV program	1 Enter the Teletext page number that you want to refer to, then press ⊗. 2 When the page number is displayed, press ☰ to show the text.

* You can also select a Teletext page of any page number that appears in the colored column at the bottom of the screen using the corresponding color-coded button on the remote.

Using FASTEXT

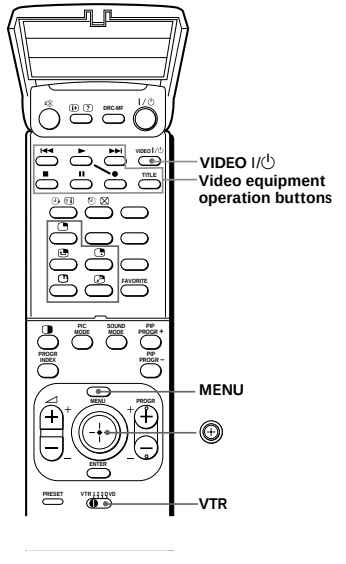
This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT program is broadcast, colored menus appear at the bottom of the screen. The color of each menu corresponds to the color-coded buttons on the remote (red , green , yellow , and blue).

To access a FASTEXT menu

Press the color-coded button on the remote corresponding to the menu you want. The menu page appears on the screen after a few seconds.

Operating optional components

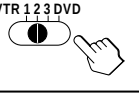
You can use the supplied remote to operate Sony video equipment such as Beta, 8 mm, VHS or DVD.



Setting up the remote to work with other connected equipment

Switch VTR to select the desired equipment type (see the chart below).

For example, to operate a Sony 8 mm VCR:



To control	Select
DVD	DVD
VTR1 (Beta)	1
VTR2 (8 mm)	2
VTR3 (VHS)	3

Notes

- If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the VTR switch.
- If the equipment does not have a certain function, the corresponding button on the remote will not operate.

Operating a VCR using the remote

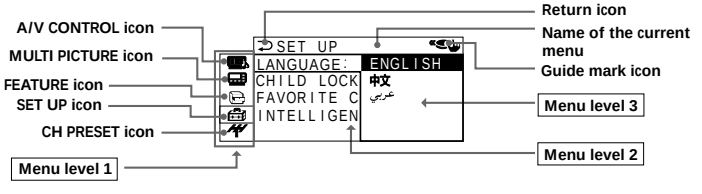
To	Press
turn on/off	VIDEO I /⏻
record	► while pressing ●.
play	►
stop	■
fast forward (▶▶)	▶▶I
rewind the tape (◀◀)	I◀◀
pause	❚❚ Press again to resume normal playback.
search the picture forward (▶▶) or backward (◀◀)	▶▶I or I◀◀ during playback. Release to resume normal playback.

Operating a DVD player using the remote

To	Press
turn on/off	VIDEO I /⏻
play	►
stop	■
pause	❚❚ Press again to resume normal playback.
step through different tracks of an audio disc	▶▶I to step forward or I◀◀ to step backward.
display the title menu	TITLE
display the menu	MENU while holding down ●.
select the menu item	Move ◎ up, down, left or right while holding down ●.

Introducing the menu system

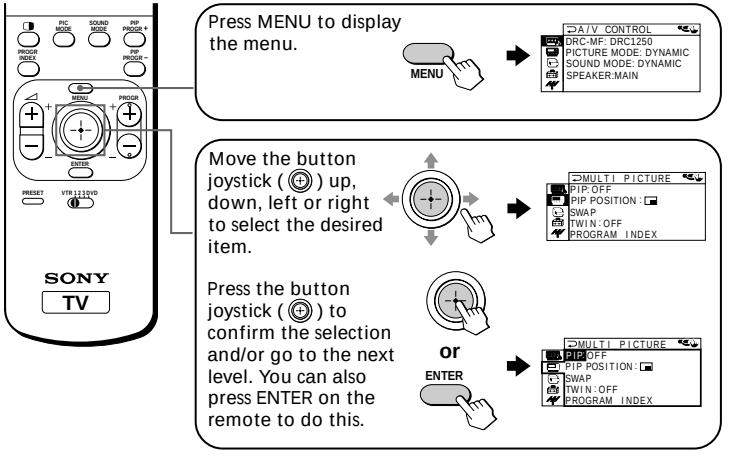
The MENU button lets you open a menu and change the settings of your projection TV. The following is an overview of the menu system.



Level 1	Level 2	Level 3/Function
"A/V CONTROL"	"DRC-MF"	Select the "DRC-MF" mode: "DRC1250" → "DRC100"
	"PICTURE MODE"	Select the picture mode: "DYNAMIC" → "STANDARD" → "HI-FINE" → "PERSONAL" → "ADJUST"
	"ADJUST"	Adjust the "PERSONAL" option: "PICTURE" → "COLOR" → "BRIGHT" → "HUE" → "SHARP"
	"SOUND MODE"	Select the sound mode: "DYNAMIC" → "DRAMA" → "SOFT" → "PERSONAL" → "ADJUST"
	"ADJUST"	Adjust the "PERSONAL" option: "BASS" → "TREBLE" → "BALANCE"
	"SPEAKER"	Select the "SPEAKER" mode: "MAIN" → "CENTER IN"
"MULTI PICTURE"	"PIP"	Activate or deactivate the PIP feature.
	"PIP POSITION"	Change the position of the sub screen.
	"SWAP"	Swap the pictures between the main and sub screens.
	"TWIN"	Display a TV program or video beside the main screen.
	"PROGRAM INDEX"	Display all the preset TV programs at the same time.
"FEATURE"	"WIDE MODE"	Activate or deactivate WIDE MODE feature.
	"ECO MODE"	Activate or deactivate ECO MODE feature.
	"GAME MODE"	Activate or deactivate GAME MODE feature.

Level 1	Level 2	Level 3/Function
"SET UP"	"LANGUAGE"	Change the menu language: "ENGLISH" → "中文" (Chinese) → "عربي" (Arabic)
	"CHILD LOCK"	Lock out specific channels.
	"FAVORITE CH"	Set favorite channels.
	"INTELLIGENT VOL"	Adjust the volume automatically.
"CH PRESET"	"AUTO PROGRAM"	Preset channels automatically.
	"MANUAL PROGRAM"	Preset channels manually.
	"SKIP"	Skip unwanted or unused program numbers.
	"TV SYS"	Select the TV system: "B/G" → "I" → "D/K" → " M"
	"COL SYS"	Select the color system: "AUTO" →" PAL" → "SECAM" → "NTSC3.58" → "NTSC4.43"

How to use the menu



Other menu operations

To	Press/Move
Adjust the setting value	Move up, down, left or right.
Move to the next/previous menu level	Move left or right.
Cancel the menu	Press MENU.

Tips

- If you want to exit from Menu level 2 to Menu level 1, move up or down until the return icon ( ) is highlighted, then press or ENTER.
- The MENU, ENTER, and +/– buttons on the projection TV can also be used for the operations above.
- The + and – buttons on the projection TV can also be used instead of moving the button joystick ( ) up or down.

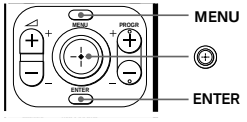
Note

- If more than 60 seconds elapse between entries, the menu screen automatically disappears.

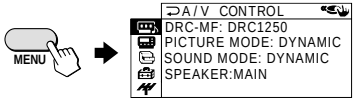
continued

Changing the "A/V CONTROL" setting

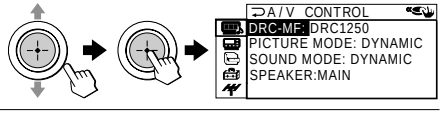
The "A/V CONTROL" menu allows you to adjust the picture and sound settings.



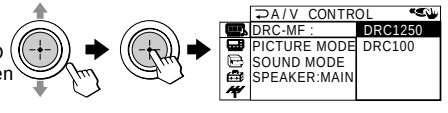
1 Press MENU.



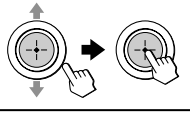
2 Move ⊕ up or down to select , then press ⊕.



3 Move ⊕ up or down to select either "DRC-MF", "PICTURE MODE", "SOUND MODE", or "SPEAKER", then press ⊕.



4 Move ⊕ up or down to select the desired option, then press ⊕.



For	Select
"DRC-MF"	either "DRC1250" or "DRC100".
"PICTURE MODE"	either "DYNAMIC", "STANDARD", "HI-FINE", "PERSONAL"*, or "ADJUST".
"SOUND MODE"	either "DYNAMIC", "DRAMA", "SOFT", "PERSONAL"*, or "ADJUST".
"SPEAKER"	either "MAIN" or "CENTER IN".

* When the "PERSONAL" mode is selected, the last adjusted picture/sound settings from the "ADJUST" option are received (see page 34).

Tip

- For details on the options under the "DRC-MF", "PICTURE MODE"/"SOUND MODE", and "SPEAKER" modes, see pages 18, 17 and 35 respectively.

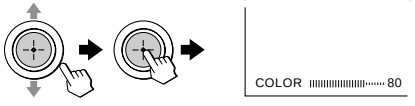
To return to the normal screen

Press MENU.

continued

Adjusting the "ADJUST" options under "PICTURE MODE"

1 Move ⊕ up or down to select the desired item (e.g., "COLOR"), then press ⊕.



2 Adjust the value according to the following table, then press ⊕.

For	Move ⊕ down or left to	Move ⊕ up or right to
"PICTURE"	decrease picture contrast	increase picture contrast
"COLOR"	decrease color intensity	increase color intensity
"BRIGHT"	darken the picture	brighten the picture
"HUE"*	increase red picture tones	increase green picture tones
"SHARP"	soften the picture	sharpen the picture

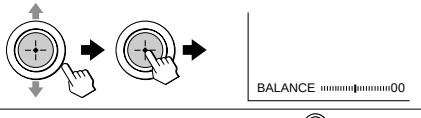
* You can adjust "HUE" for the NTSC color system only.

3 Repeat the above steps to adjust other items.

The adjusted settings will be received when you select "PERSONAL".

Adjusting the "ADJUST" options under "SOUND MODE"

1 Move ⊕ up or down to select the desired item (e.g., "BALANCE"), then press ⊕.



2 Adjust the value according to the following table, then press ⊕.

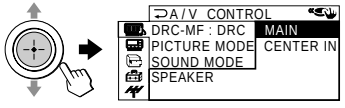
For	Move ⊕
"BASS"	down or left to decrease the bass, up or right to increase the bass.
"TREBLE"	down or left to decrease the treble, up or right to increase the treble.
"BALANCE"	down or left to increase the left speaker's volume, up or right to increase the right speaker's volume.

3 Repeat the above steps to adjust other items.

The adjusted settings will be received when you select "PERSONAL".

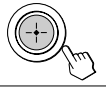
Setting the “SPEAKER” options

1 In the “SPEAKER” menu, move ⊕ up or down to select the desired option (see table below).



Select	To
“MAIN”	listen to the sound from a projection TV.
“CENTER IN”	use the projection TV speakers as center speakers.

2 Press ⊕ to confirm the selected option.

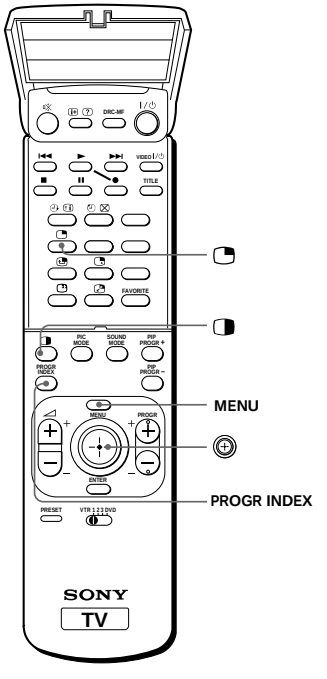


Tip

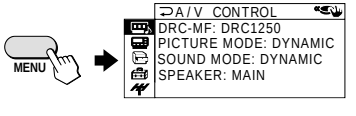
- For details on the menu system and how to use the menu, refer to “Introducing the menu system” on page 30.

Changing the “MULTI PICTURE” setting

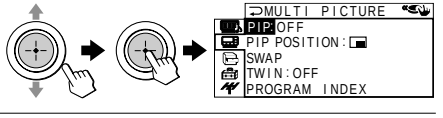
The “MULTI PICTURE” menu allows you to use the Picture-in-Picture (PIP), TWIN pictures, or PROGRAM INDEX features.



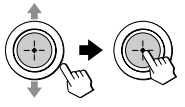
1 Press MENU.

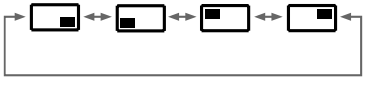


2 Move ⊕ up or down to select ▣, then press ⊕.



3 Move ⊕ up or down to select the desired option (see the table below), then press ⊕.



Select	To
"PIP"	display the PIP screen within the main picture. Move ⊕ up or down to select "ON", then press ⊕. To cancel, press ◔ or select "OFF", then press ⊕.
"PIP POSITION"	change the position of the PIP screen. Move ⊕ up or down to select the desired position, then press ⊕. 
"SWAP"	swap the main and PIP screens, or right and left pictures of the TWIN pictures.
"TWIN"	display a different TV program or video beside the main picture. Move ⊕ up or down to select "ON", then press ⊕. To cancel, press ◑ or select "OFF", then press ⊕.
"PROGRAM INDEX"	view multiple programs on the sub-screens. To cancel, press PROGR INDEX.

To return to the normal screen

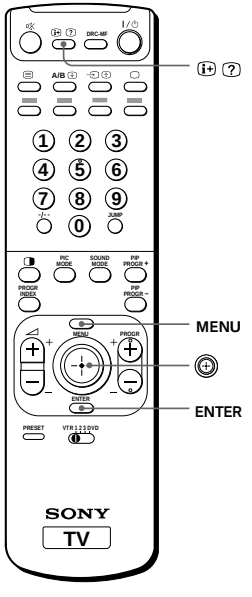
Press MENU.

Tip

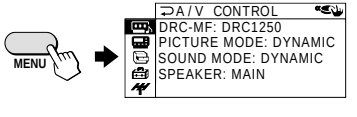
- For details on the menu system and how to use the menu, see "Introducing the menu system" on page 30.

Changing the "FEATURE" setting

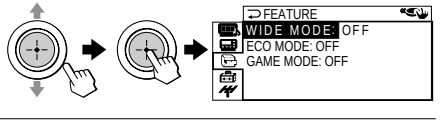
The "FEATURE" menu allows you to change the size of the picture on the screen when receiving wide mode (16:9) picture signals. You can also adjust the picture setting that is suitable for viewing video games, and reduce the power consumption of your projection TV.



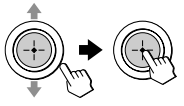
1 Press MENU.

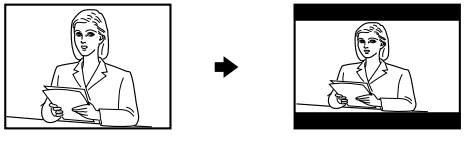


2 Move ⊕ up or down to select 🖵, then press ⊕.



3 Move ⊕ up or down to select the desired option (see the table below), then press ⊕.



Select	To
"WIDE MODE"	change the size of the picture when receiving wide-mode (16:9) picture signal. Move ⊕ up or down to select "ON", then press ⊕.  To restore the normal picture size, select "OFF" then press ⊕.
"ECO MODE"	reduce power consumption of your projection TV to save energy. Move ⊕ up or down to select "ON", then press ⊕. To cancel, select "OFF", then press ⊕.
"GAME MODE"	adjust the picture setting that is suitable to view video games. Move ⊕ up or down to select "ON", then press ⊕. To cancel, select "OFF", then press ⊕.

Notes

- When you turn on "ECO MODE", the picture may become dimmer. Turning "ECO MODE" off will restore the picture to its original setting.
- "WIDE MODE" is available only when you have selected DRC1250 (NTSC mode) in the "A/V CONTROL" menu with video input or DVD input.
- "WIDE MODE" and "GAME MODE" is available only when receiving signals through the (video input), (S video input), or (component video input) jacks at the front and rear of your projection TV.
- If "ECO MODE" is on, the ECO MODE ( ) icon will appear at the bottom right corner of the screen when you turn on the projection TV or when you press on the remote. (See pages 13 and 14)

To return to the normal screen

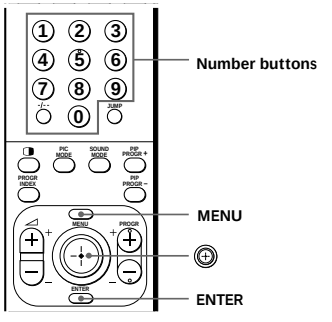
Press MENU.

Tip

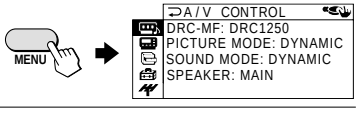
- For details on the menu system and how to use the menu, see "Introducing the menu system" on page 30.

Changing the "SET UP" setting

The "SET UP" menu allows you to: change the menu language, block channels, adjust the picture position, program your favorite channels, and adjust the volume automatically.

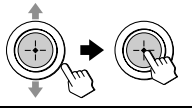


1 Press MENU.



2 Move ⊕ up or down to select , then press ⊕.

3 Move ⊕ up or down to select the desired option, then press ⊕.



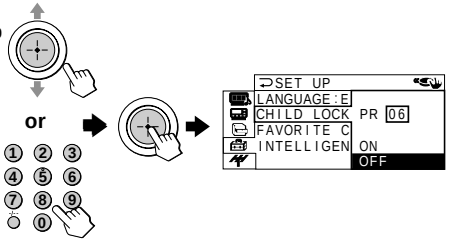
Select	To
"LANGUAGE"	change the menu language (see page 15).
"CHILD LOCK"	block channels (see page 41).
"FAVORITE CH"	select your favorite channels (see pages 19 and 42).
"INTELLIGENT VOL"	adjust the volume of all TV programs automatically. Move ⊕ up or down to select "ON", then press ⊕. To cancel, select "OFF", then press ⊕.

To return to the normal screen

Press MENU.

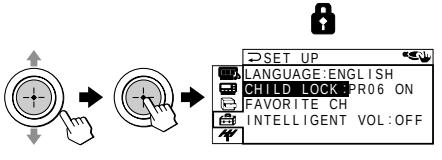
Blocking channels (“CHILD LOCK”)

1 After selecting “CHILD LOCK”, either move ⊕ up or down, or press the number buttons (or PROGR +/–) to select the desired channel (e.g. PR 06), then press ⊕.

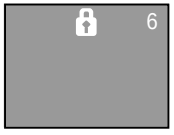


2 Move ⊕ up or down to select “ON”, then press ⊕.
To unlock the channel, select “OFF”.

The lock symbol (🔒) appears on the screen when “ON” is selected.



If a locked channel is selected, the lock symbol appears on the screen.



3 Repeat steps 1 and 2 to lock other channels.

To return to the normal screen

Press MENU.

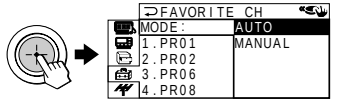
Note

- If you preset a locked channel, that channel will be unlocked automatically (see page 43).

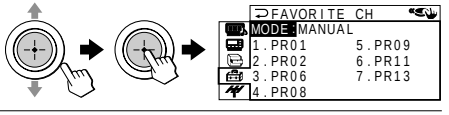
continued

Changing the favorite channel setting

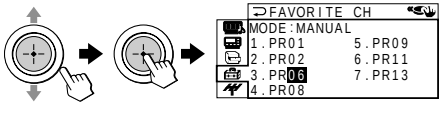
1 After selecting “FAVORITE CH”, make sure “MODE” is selected, then press ⊕.



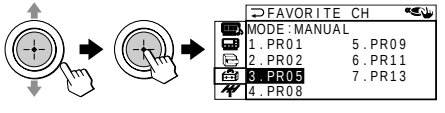
2 Move ⊕ up or down to select “MANUAL”, then press ⊕.



3 Move ⊕ up or down to select the program you want to change, then press ⊕.



4 Move ⊕ up or down to change the number, then press ⊕.



5 Repeat steps 3 and 4 to set other channels.

To return to the normal screen

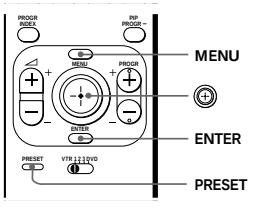
Press MENU.

Note

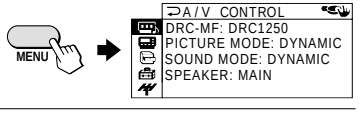
- If you press the PROGR +/– buttons or number buttons in step 4 above, the projection TV will display the channel immediately.

Changing the "CH PRESET" setting

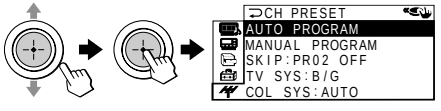
The "CH PRESET" menu allows you to adjust the setup of your projection TV. For example, you can manually tune in a channel with a weak signal that fails to be tuned in by automatic presetting.



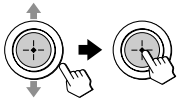
1 Press MENU.



2 Move ⊕ up or down to select ✓, then press ⊕.



3 Move ⊕ up or down to select the desired option, then press ⊕.



Select	To
"AUTO PROGRAM"	preset channels automatically.
"MANUAL PROGRAM"	preset channels manually. See "Presetting channels manually" on page 44.
"SKIP"	skip unwanted or unused channels. 1 Either move ⊕ up or down, or press the number buttons (or PROGR +/–) until the unused or unwanted channel number appears, then press ⊕. 2 Select "ON", then press ⊕. 3 To disable other channels, repeat steps 1 and 2. To restore the skipped channel, select "OFF" in step 2.
"TV SYS"	select the TV system.
"COL SYS"	select the color system. Normally, set this to "AUTO".

To return to the normal screen

Press MENU.

Tip

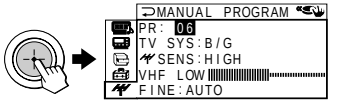
- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 30.

continued

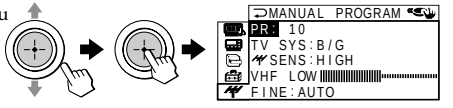
Presetting channels manually

1 After selecting "MANUAL PROGRAM", select the program number to which you want to preset a channel.

(1) Make sure "PR" is selected, then press ⊕.



(2) Move ⊕ up or down until the program number you want to preset (e.g., program number "10") appears on the menu, then press ⊕.

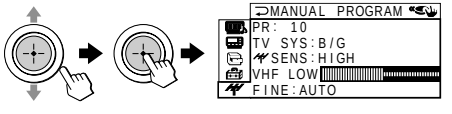


Tips

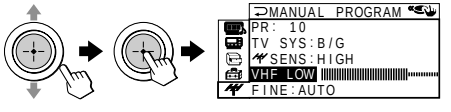
- You can also select the "MANUAL PROGRAM" menu directly by pressing the PRESET button on the remote.
- You can also select the program number with the PROGR +/– or number buttons.

2 Select the desired channel.

(1) Move ⊕ up or down to select either "VHF LOW", "VHF HIGH", or "UHF", then press ⊕.

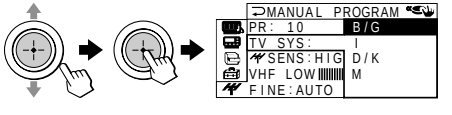


(2) Move ⊕ up or down until the desired channel's broadcast appears on the TV screen, then press ⊕.

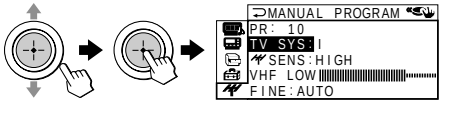


3 If the sound of the desired channel is abnormal, select the appropriate TV system.

(1) Move ⊕ up or down to select "TV SYS", then press ⊕.

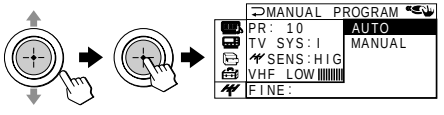


(2) Move ⊕ up or down until the sound becomes normal, then press ⊕.

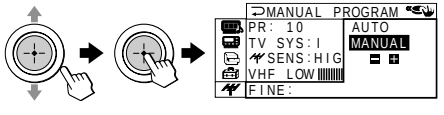


4 If you are not satisfied with the picture and sound quality, you may be able to improve them by using the "FINE" tuning feature.

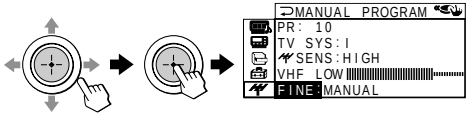
(1) Move ⊕ up or down to select "FINE", then press ⊕.



(2) Move ⊕ up or down to select "MANUAL", then press ⊕.

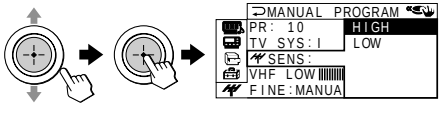


(3) Move ⊕ either up, down, left or right until the picture and sound quality are optimal, then press ⊕. The + or – icon on the menu flashes while tuning.

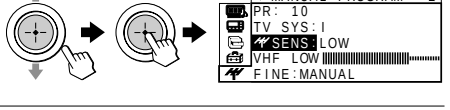


5 If the TV signal is too strong and the picture is distorted, you can adjust the TV reception sensitivity.

(1) Move ⊕ up or down to select "SENS", then press ⊕.



(2) Move ⊕ up or down to select "LOW", then press ⊕.



To return to the normal screen

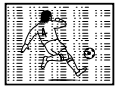
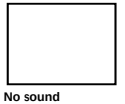
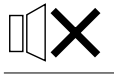
Press MENU.

Notes

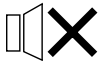
- The TV system ("TV SYS") and the TV reception sensitivity ("SENS") settings are memorized for each program number.
- If you preset a locked channel, that channel will be unlocked automatically (see page 41).

Troubleshooting

If you have any problem while viewing your TV, please check the following troubleshooting guide. If the problem persists, contact your Sony dealer.

Symptom	Possible cause	Solutions	Page
Snowy picture  Noisy sound	• The connection is loose or the cable is damaged.	• Check the antenna cable and connection on the projection TV, VCR and at the wall.	5
	• Channel presetting is inappropriate or incomplete.	• Press the PRESET button to display the "MANUAL PROGRAM" menu and preset the channel again.	44
	• The antenna type is inappropriate.	• Check the antenna type (VHF/UHF). Contact a Sony dealer for advice.	–
	• The antenna direction needs adjustment.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Signal transmission is low.	• Try using a booster.	–
Distorted picture Noisy sound	• Broadcast signals are too strong.	• Press the PRESET button to display the "MANUAL PROGRAM" menu. Then, select "SENS: LOW". • Turn off or disconnect the booster if it is in use.	45 –
Good picture Noisy sound	• The TV system setting is inappropriate.	• If the sound of all the channels are noisy, display the "CH PRESET" menu and select "AUTO PROGRAM" to preset the channels again. • If the sound of some channels is noisy, select the channel, then display the "CH PRESET" menu and select the appropriate TV system ("TV SYS").	43 44
No picture  No sound 	• The power cord, antenna or VCR is not connected.	• Check the power cord, antenna and the VCR connections.	5
	• The projection TV is not turned on.	• Press I/⏻ on the remote. • Press ⏻ on the TV to turn off the projection TV for about five seconds, then turn it on again.	13 14

Troubleshooting (continued)

Symptom	Possible cause	Solutions	Page
Good picture **No sound** 	• The volume level is too low.	• Press + to increase the volume level.	14
	• The sound is muted.	• Press to cancel the muting.	14
	• The broadcast signal has a transmission problem.	• Press A/B until a better sound is heard.	24
	• The "SPEAKER" setting in the "AV CONTROL" menu is inappropriate.	• When connecting to ← C– (center speaker input) on your projection TV to use the projection TV speakers as center speakers, set SPEAKER: CENTER IN, or set SPEAKER: MAIN to listen to the sound from a projection TV.	35
Dotted lines or stripes 	• There is local interference from cars, neon signs, hair dryers, power generators, etc.	• Do not use a hair dryer or other equipment near the projection TV. • Adjust the antenna direction for minimum interference. Contact a Sony dealer for advice.	– –
Double images or "ghosts" 	• Broadcast signals are reflected by nearby mountains or buildings.	• Use a highly directional antenna. • Use the fine tuning ("FINE") function.	– 45
	• The antenna direction needs adjustment.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Use of a booster is inappropriate.	• Turn off or disconnect the booster if it is in use.	–
No color 	• The color level setting is too low.	• Display the "A/V CONTROL" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level.	34
	• The color system setting is inappropriate.	• Display the "CH PRESET" menu and check the color system ("COL SYS") setting (usually set this to "AUTO").	43
	• The antenna direction needs adjustment.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
Abnormal color patches 	• The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the projection TV.	• Locate external speakers or other equipment away from the projection TV. Do not move the projection TV while the projection TV is turned on. Press ⏻ on the projection TV to turn off the TV for about five minutes, then turn it on again.	–

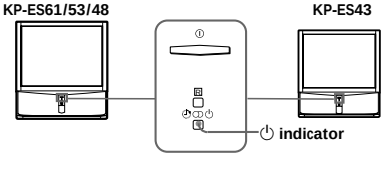
continued

Symptom	Possible cause	Solutions	Page
Projection TV cannot receive stereo broadcast signal.	• The stereo reception setting is inappropriate.	• Press A/B until "AUTO" appears on the screen.	24
Stereo broadcast sound switches on and off or is distorted. **or** **The sound switches between stereo and monaural frequently.**	• The connection is loose or the cable is damaged.	• Check the antenna cable and connection on the projection TV, VCR and on the wall.	5
	• The antenna direction needs adjustment.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• The broadcast signal has a transmission problem.	• Press A/B until a better sound is heard.	24
"100?" appears at the top of the screen after approximately 10 seconds and there is no Teletext display.	• The channel carries no Teletext broadcast.	—	26
Teletext display is incomplete (snowy picture or double images).	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the projection TV, VCR, and at the wall.	5
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Signal transmission is too low.	• Try using a booster. • Use the fine tuning ("FINE") function.	– 45
Lines moving across the TV screen.	• There is interference from external sources, e.g., heavy machineries, nearby broadcast station.	• Use the fine tuning ("FINE") function.	45
Cannot play shooting games.	• Some shooting games which involve pointing a light beam at the projection TV screen with an electronic gun or rifle cannot be used with your TV. For detail, see the instruction manual supplied with the video game software.	—	–

Symptom	Possible cause	Solutions	Page
TV cabinet creaks.	• Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.	—	–
Static discharge is felt when touching the TV cabinet.	• This is the same static discharge that is felt when touching metal door handles or car doors especially when the air is dry, for example in winter. This does not indicate a malfunction.	—	–

Self-diagnosis function

Your projection TV is equipped with a self-diagnosis function. If there is a problem with your projection TV, the ⏻ (standby) indicator flashes red. The number of times the ⏻ indicator flashes indicates the possible causes.



1 Check that the ⏻ indicator flashes red a number of times between 3-second intervals.

2 Count the number of times the ⏻ indicator flashes.

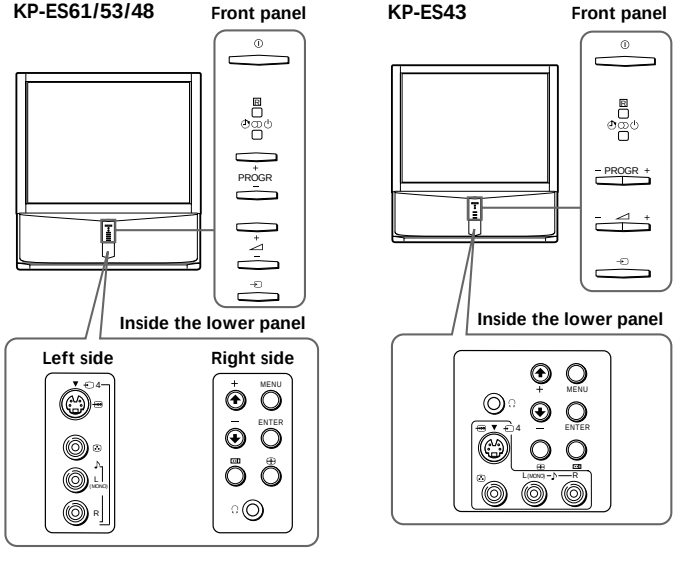
3 Press ⏻ (main power) to turn off your projection TV.

4 Inform your nearest Sony service center about the number of times the ⏻ indicator flashed.

Be sure to note the model name and serial number located on the rear of your projection TV.

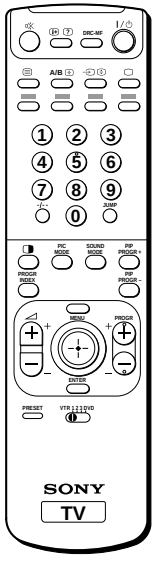
Identifying parts and controls

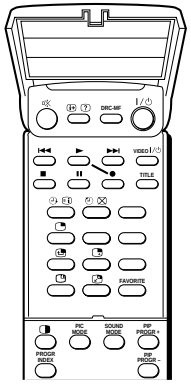
Front and inside the lower panels



Button	Function	Page
Front panel		
⏻	Turn off completely or turn on the projection TV.	13
PROGR +/–	Select program number.	13
🔊 +/–	Adjust volume.	14
⇨	Select TV or video input.	14
Inside the lower panel		
MENU	Display the menu.	32
ENTER	Confirm selected items.	32
⊞	Adjust convergence.	7
▶▶|	Preset channel automatically.	6
↑+/↓–	Select menu item.	32
🎧	Headphone jack	–

Remote control



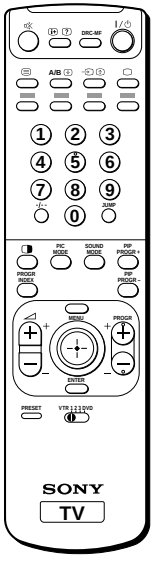


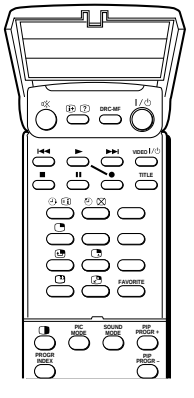
The names/symbols of buttons on the remote are indicated in different colors to represent the available functions.

Label color	Button function
White	For general TV operations
Green	For Teletext operations
Yellow	For PIP operations

Button	Function	Page
I / ⏻	Turn off temporarily or turn on the projection TV.	13
PROGR +/–	Select program number.	13
0 – 9, -/--	Input numbers.	13
ⓘ+	Display on-screen information.	14
🔇	Mute the sound.	14
▢	Display the TV program.	14
⮆	Select TV or video input.	14
◿ +/–	Adjust volume.	14
JUMP	Jump to previous channel.	14
Timer operations		
◷	Set projection TV to turn on automatically.	16
◷	Set projection TV to turn off automatically.	16
SOUND MODE	Select sound mode.	17
PIC MODE	Select picture mode.	17
DRC-MF	Select DRC-MF mode.	18
Favorite Channel operations		
FAVORITE	Display favorite channels.	19
◎	Select desired channel.	19
PIP and Twin picture operations		
◔	Display the PIP screen.	20
◨	Display TWIN pictures.	20
◎	Adjust Twin picture size.	21
PIP PROGR +/ PIP PROGR –	Change program in PIP/ Twin picture.	21
◔	Select video input for PIP/ Twin picture.	21
◔	Swap main and PIP/Twin picture.	21
◔	Freeze PIP screen.	21
◔	Adjust position of PIP screen.	21

continued



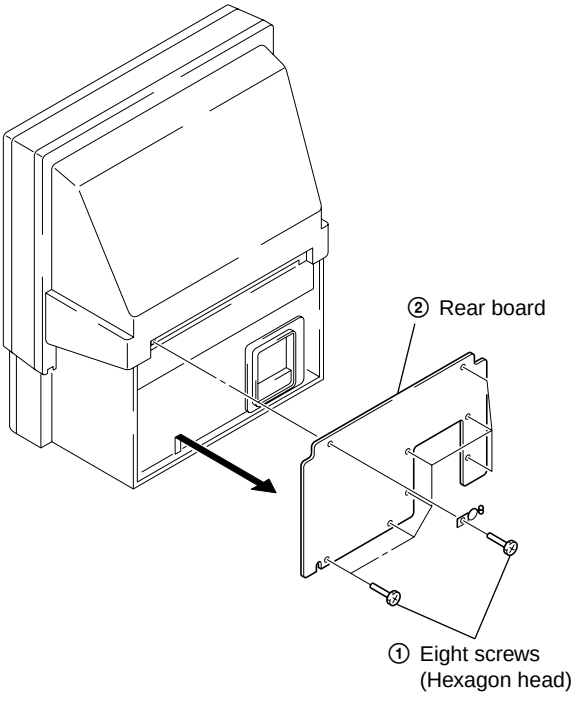


Button	Function	Page
Program Index operations		
PROGR INDEX	Display all preset TV programs.	22
PROGR +/–	View next/previous 12 TV programs.	22
◎	Select desired channel.	23
Stereo/bilingual operations		
A/B	Select stereo/bilingual mode.	24
Teletext operations		
☰	Display Teletext broadcast.	26
☰i	Display Teletext service contents.	27
⊕	Stop Teletext page from scrolling.	27
?	Reveal concealed information.	27
⇳	Enlarge the Teletext display.	27
⊠	Show TV screen while waiting for Teletext page.	27
0 - 9	Input Teletext page number.	27
PROGR +/–	Display the next or previous page.	27
(red, green, yellow, blue)	Access a FASTEXT menu.	27
Optional components operations		
VTR	Set up the remote.	28
VIDEO I/⏻	Power.	29
TITLE	Display the title menu.	29
►	Play.	29
►►I	Fast forward/Search forward.	29
I◄◄	Rewind/Search backward.	29
●	Record.	29
■	Stop.	29
❚❚	Pause.	29
Menu operations		
MENU	Display the menu.	32
◎	Select, adjust and confirm selected items.	32
ENTER	Confirm selected items.	32
PRESET	Display "MANUAL PROGRAM" menu.	44

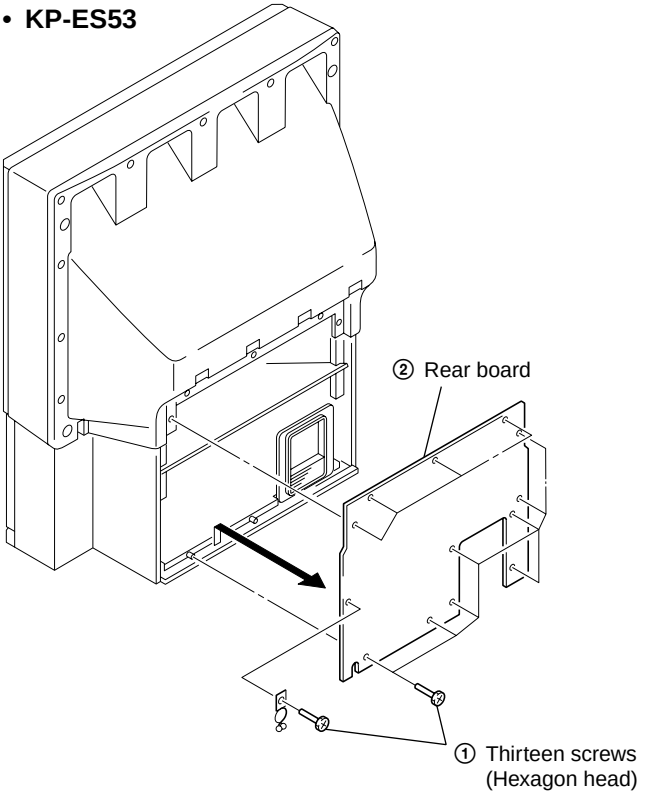
SECTION 3
DISASSEMBLY

3-1. REAR BOARD REMOVAL

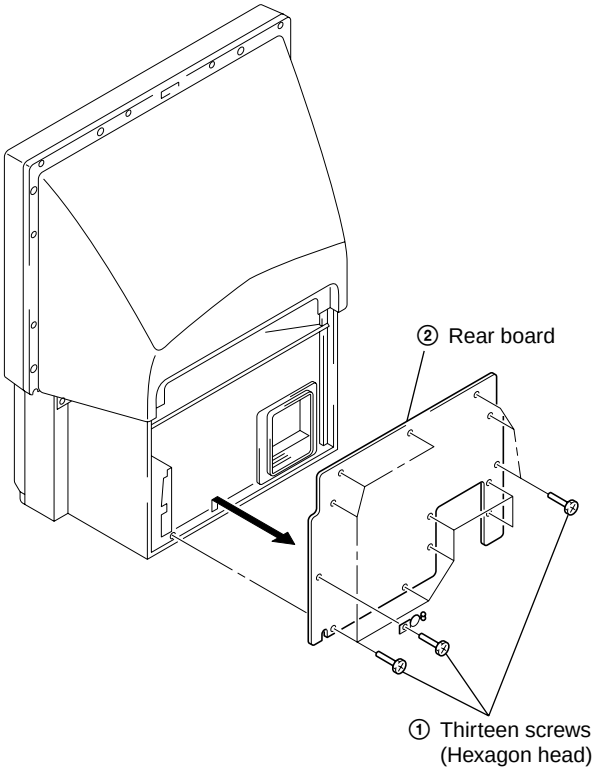
• **KP-ES43**



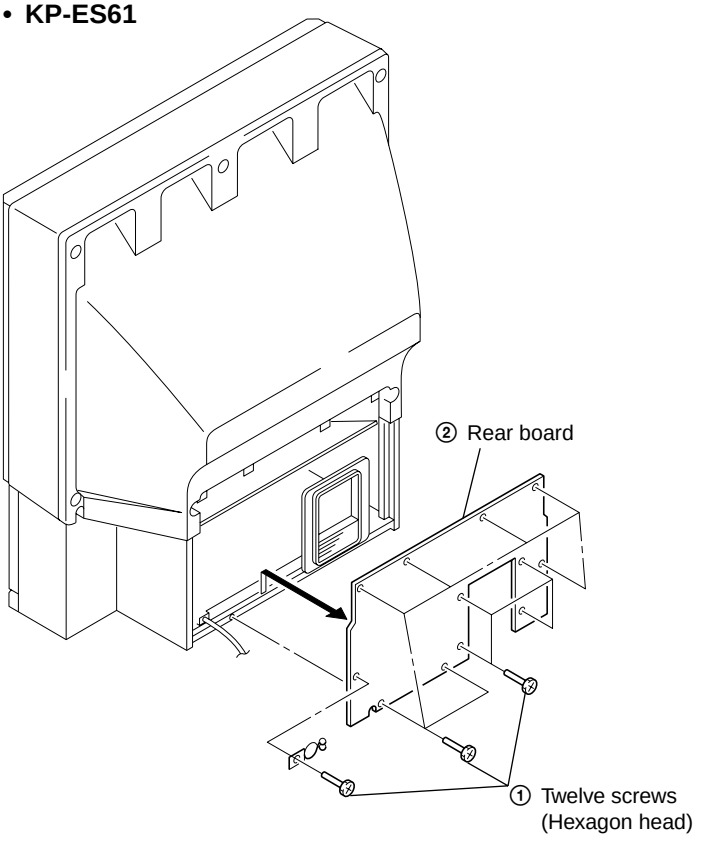
• **KP-ES53**



• **KP-ES48**

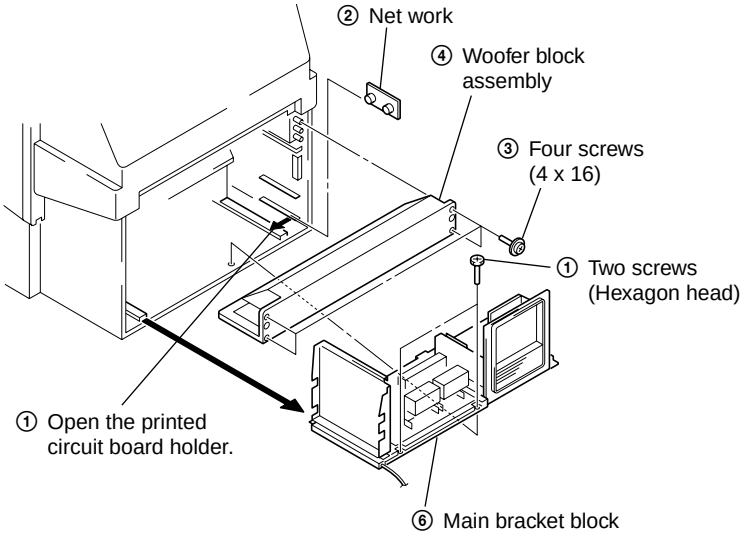


• **KP-ES61**

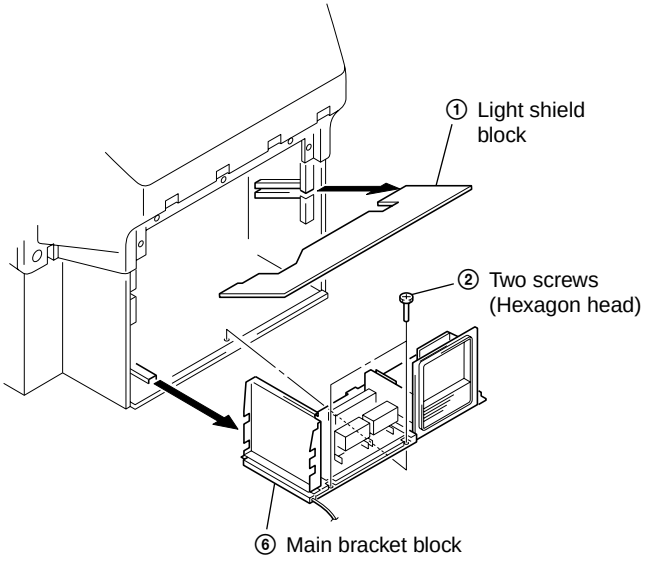


3-2. MAIN BRACKET BLOCK REMOVAL

• **KP-ES43**

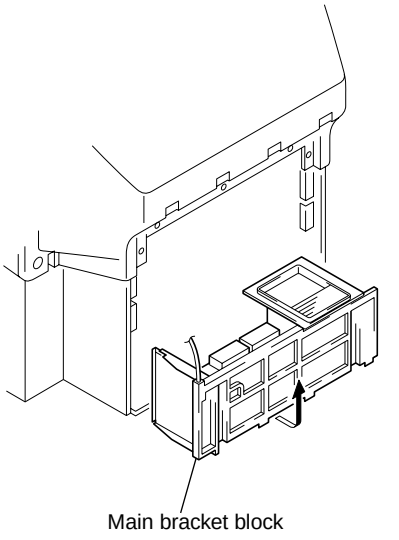

② Net work
④ Woofer block assembly
③ Four screws (4 x 16)
① Two screws (Hexagon head)
① Open the printed circuit board holder.
⑥ Main bracket block

• **KP-ES48/ES53/ES61**



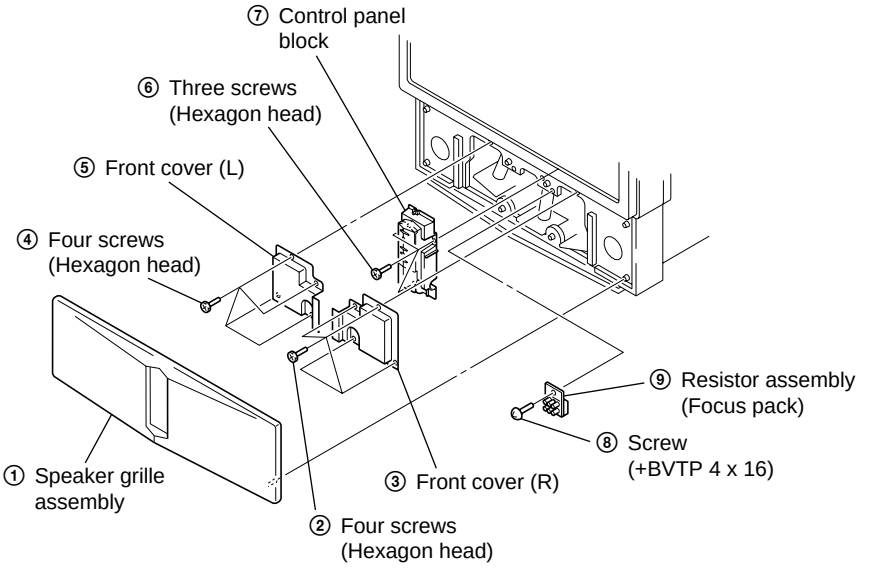
3-3. SERVICE POSITION

• **KP-ES43/ES48/ES53/ES61**

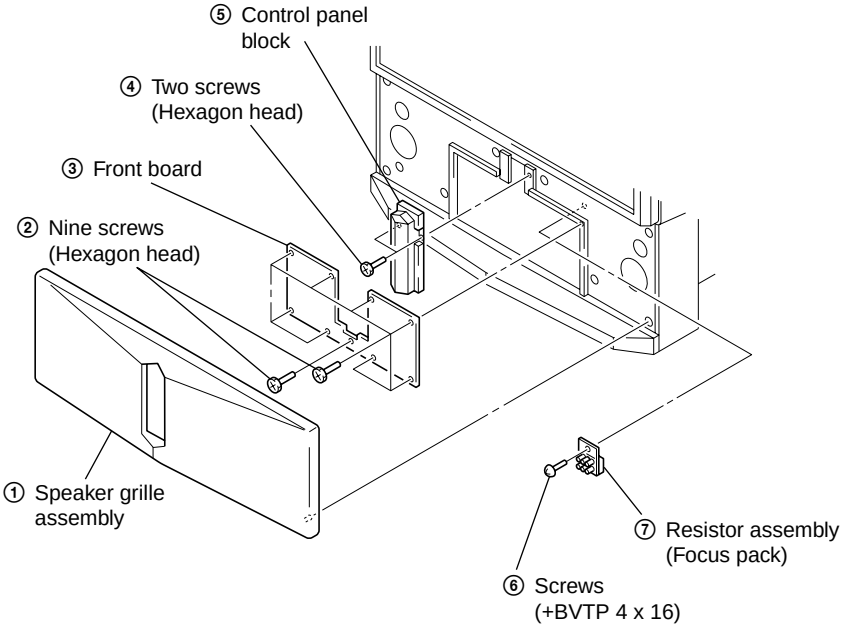


3-4. CONTROL PANEL BLOCK AND RESISTOR ASSEMBLY (FOCUS PACK) REMOVAL

- **KP-ES43**

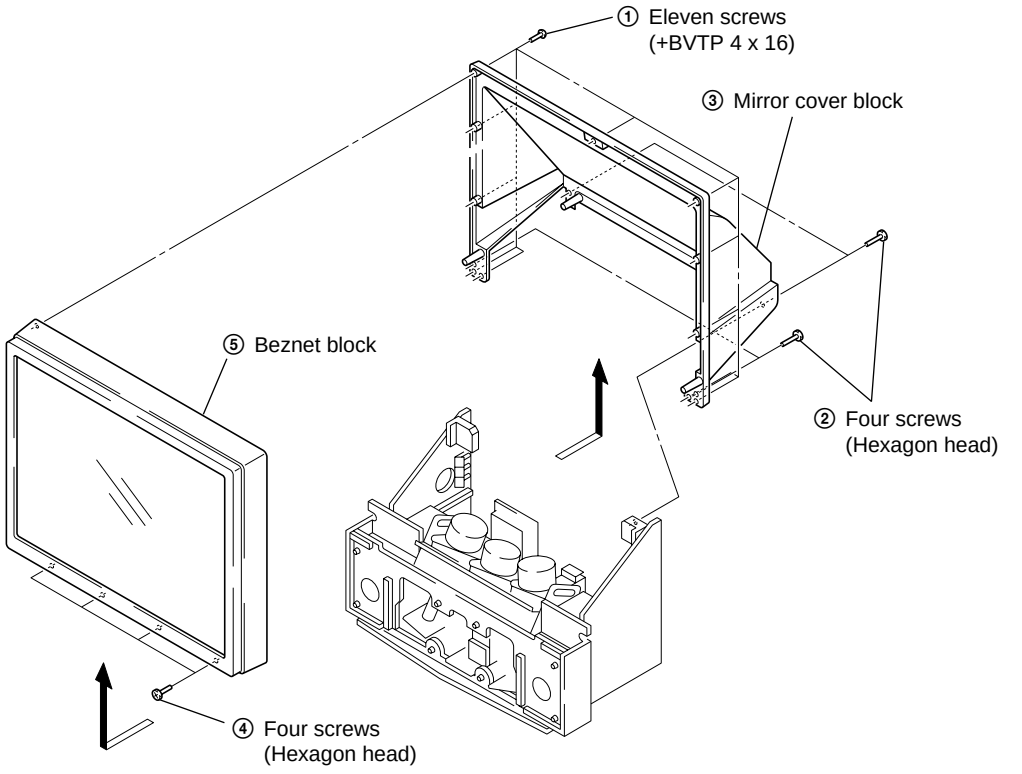

⑦ Control panel block
⑥ Three screws (Hexagon head)
⑤ Front cover (L)
④ Four screws (Hexagon head)
⑨ Resistor assembly (Focus pack)
⑧ Screw (+BVTP 4 x 16)
① Speaker grille assembly
③ Front cover (R)
② Four screws (Hexagon head)

- **KP-ES48/ES53/ES61**

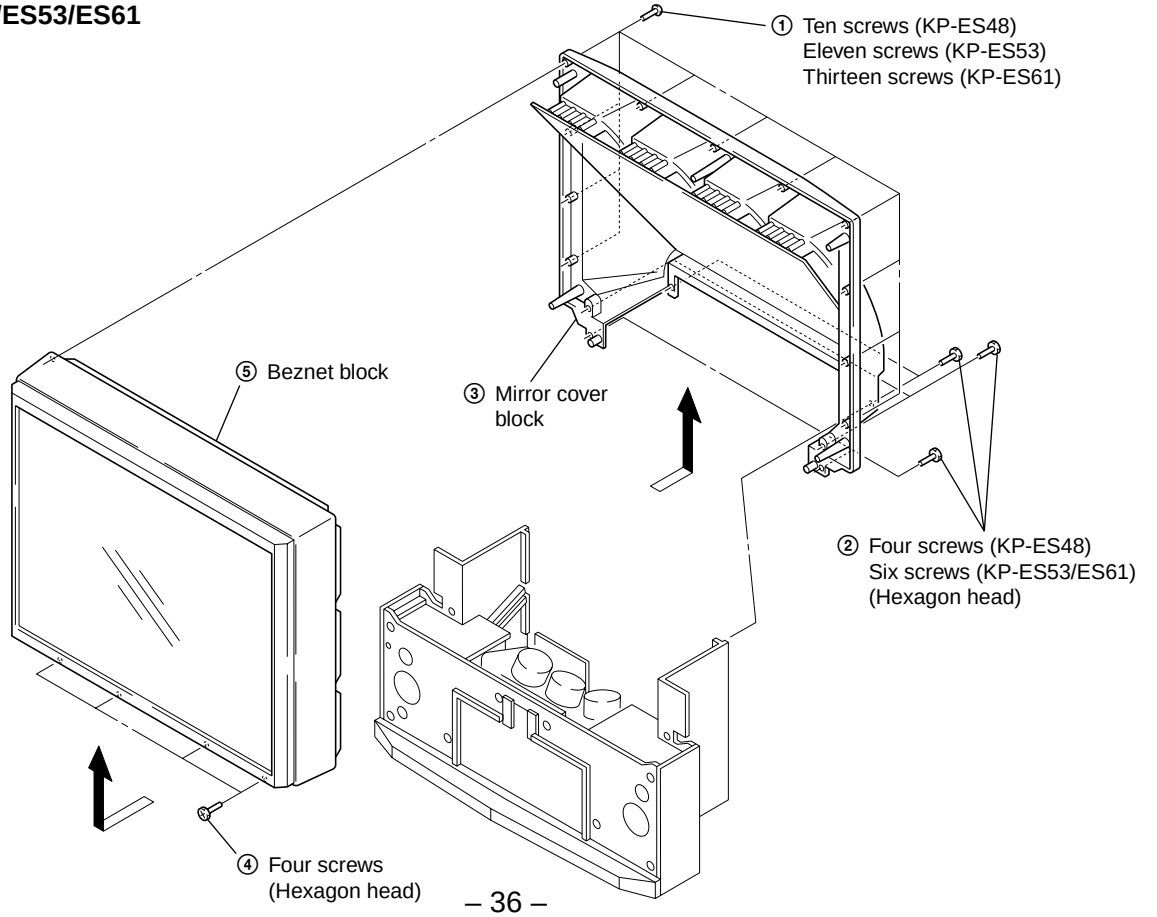

⑤ Control panel block
④ Two screws (Hexagon head)
③ Front board
② Nine screws (Hexagon head)
① Speaker grille assembly
⑦ Resistor assembly (Focus pack)
⑥ Screws (+BVTP 4 x 16)

3-5. BEZNET BLOCK REMOVAL

• **KP-ES43**



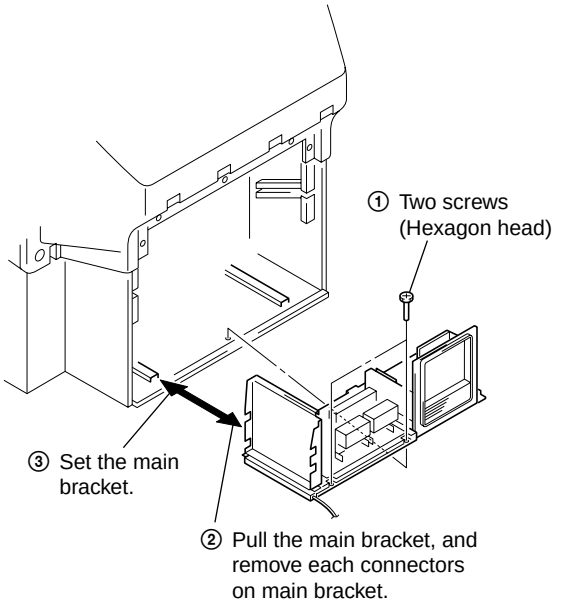
• **KP-ES48/ES53/ES61**



3-6. CHASSIS BLOCK REMOVAL

(1) MAIN BRACKET REMOVAL

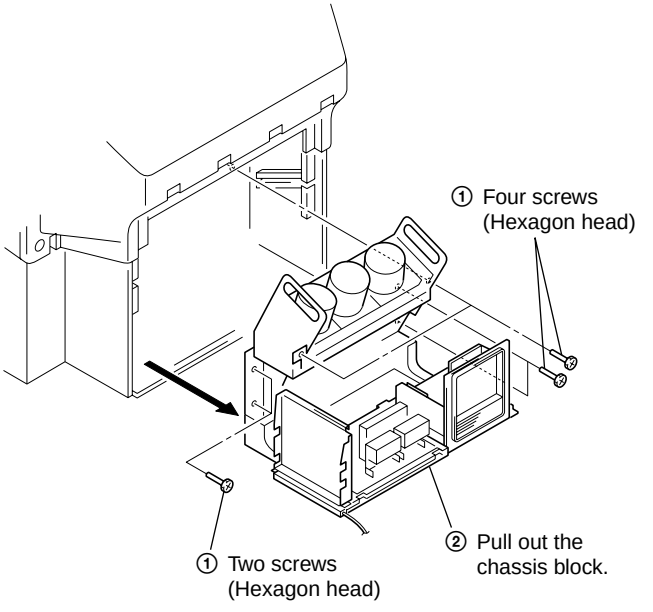
• KP-ES43/ES48/ES53/ES61



※ Pay particular attention to the wires of each Printed circuit boards when puling out the main bracket.

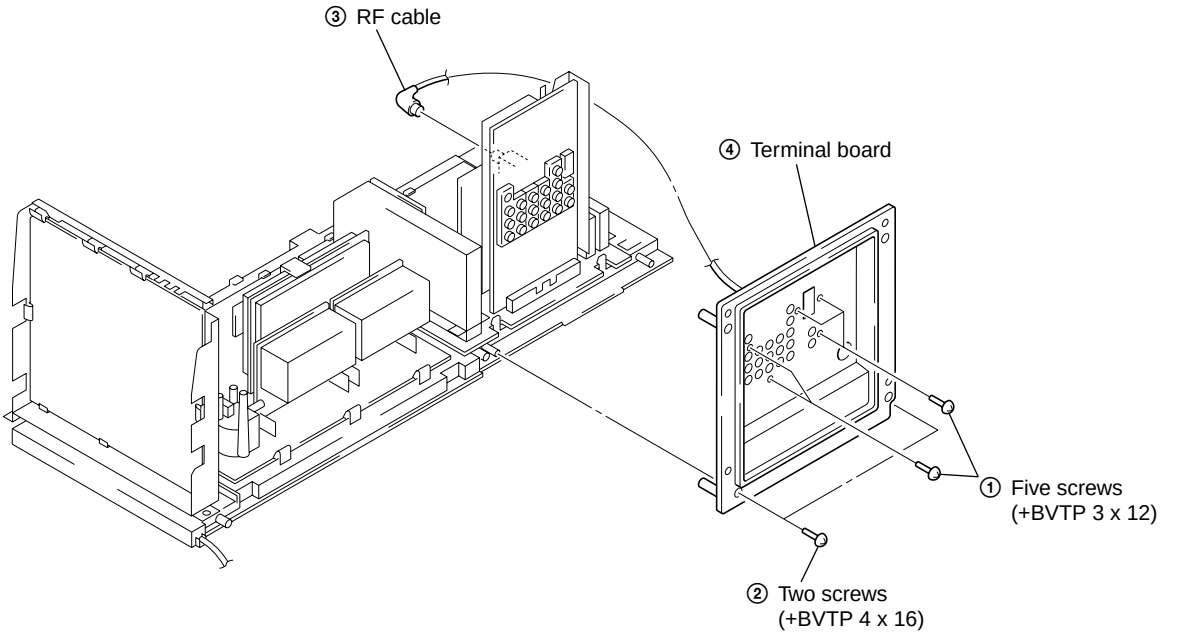
(2) CHASSIS BLOCK REMOVAL

• KP-ES43/ES48/ES53/ES61

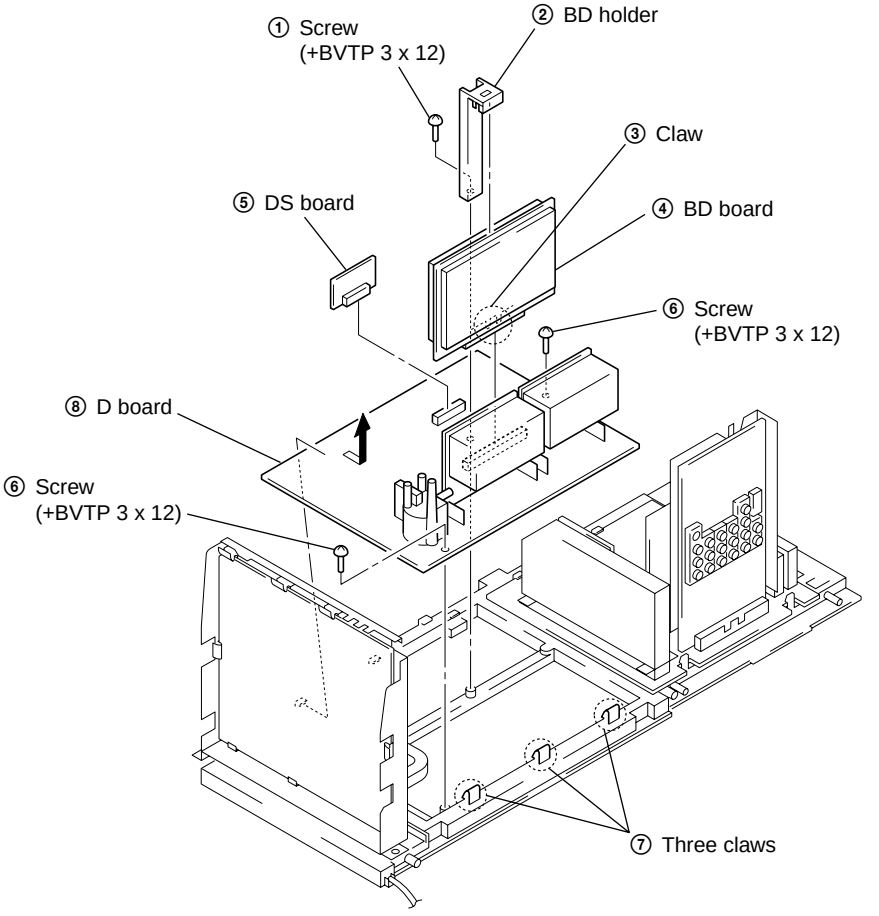


※ Pull out the chassis block by gripping the handles as shown in the diagram.
At this time, pay particular attention to the components removed in (1).

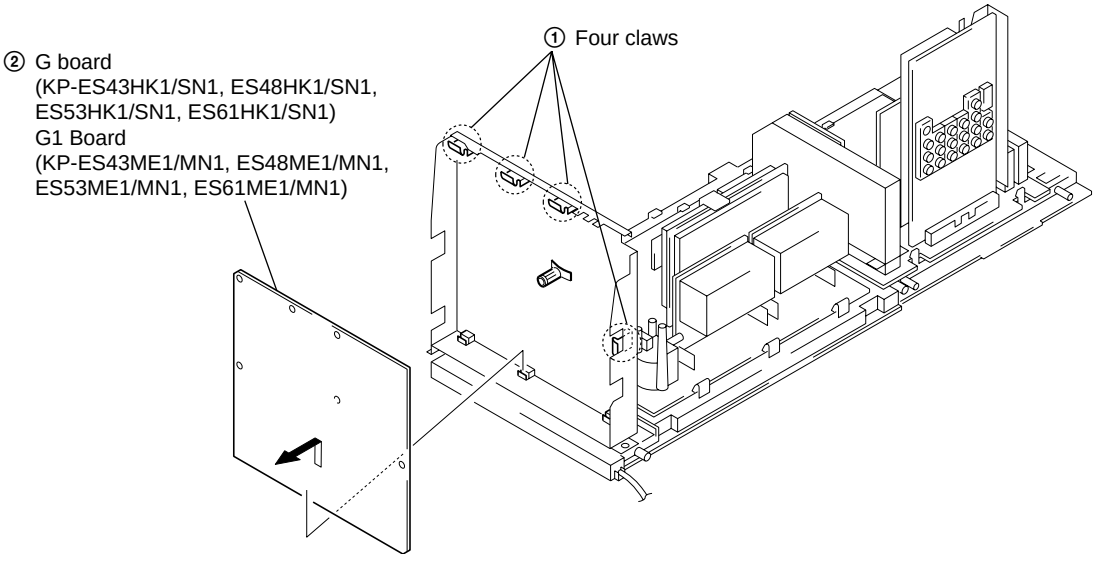
3-7. TERMINAL BOARD REMOVAL



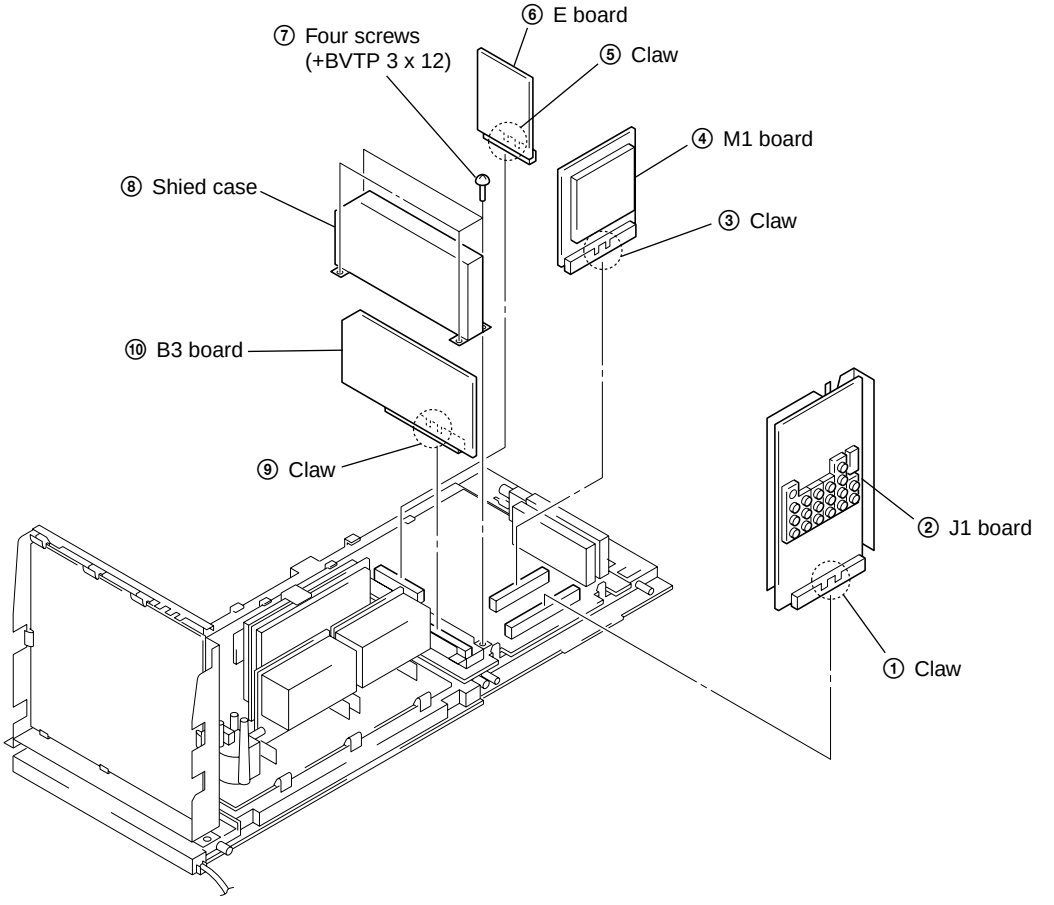
3-8. BD, DS, D BOARDS REMOVAL



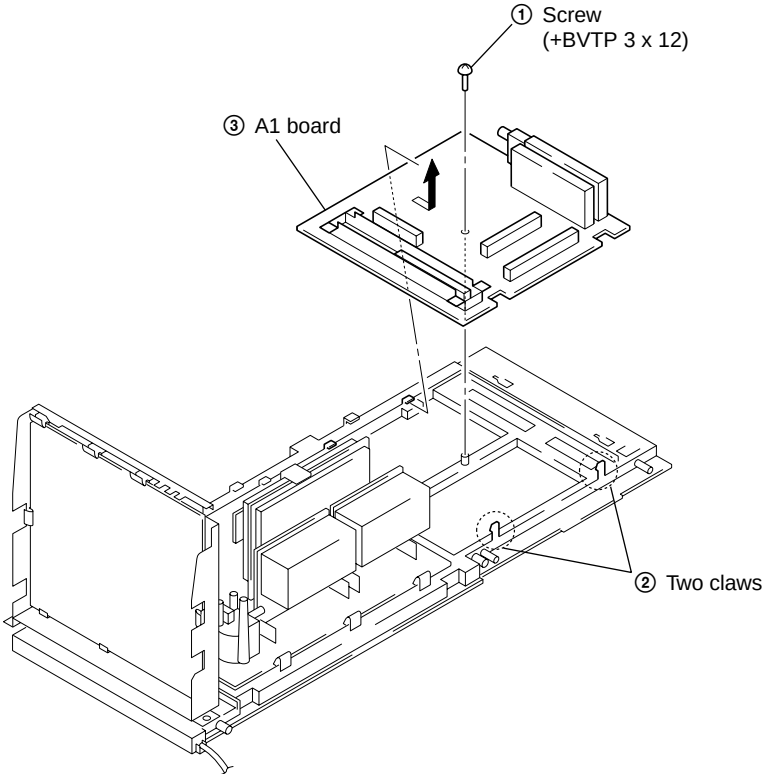
3-9. G, G1 BOARD REMOVAL



3-10. J1, B3, E, M1 BOARDS REMOVAL

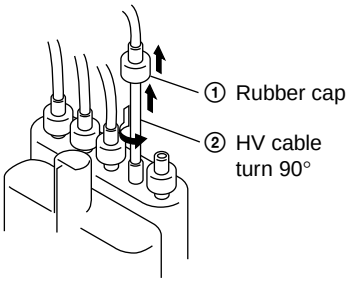


3-11. A1 BOARD REMOVAL

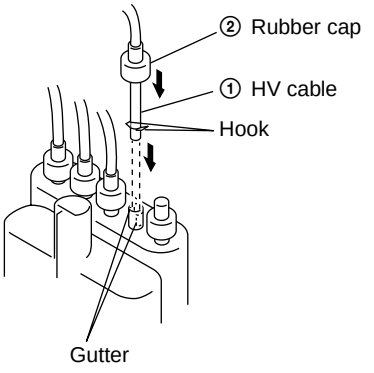


3-12. HIGH-VOLTAGE CABLE REMOVAL AND INSTALLATION

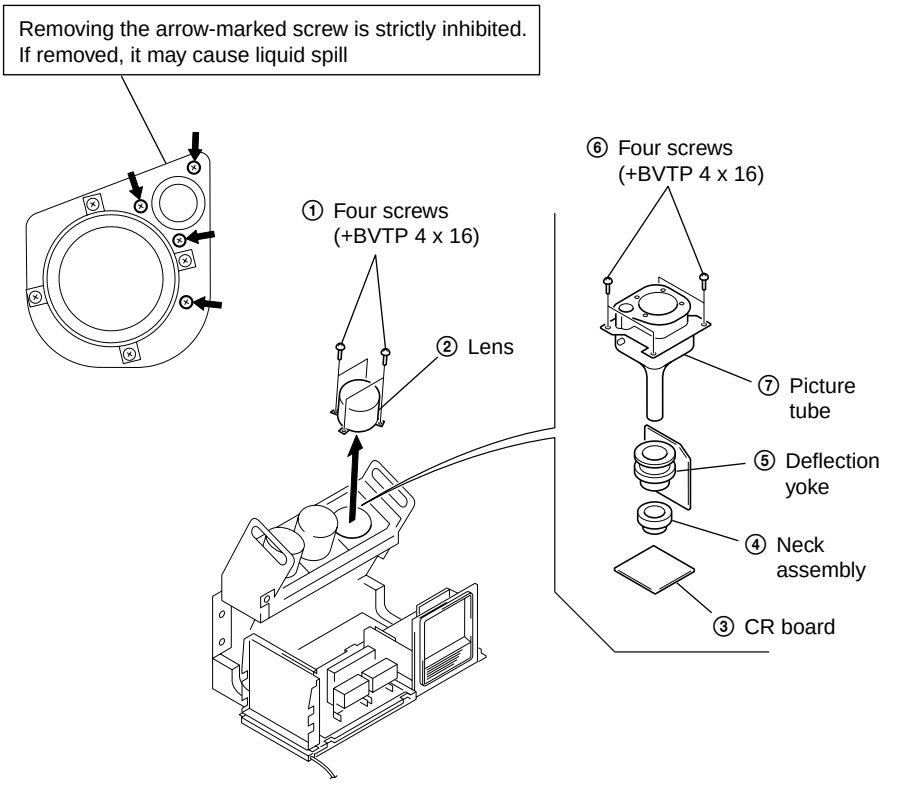
(1) Removal



(2) Installation



3-13. PICTURE TUBE REMOVAL



SECTION 4
SET-UP ADJUSTMENTS

4-1. SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT)

1. Receive the Monoscope signal.
2. Set 50% BRIGHTNESS and minimum PICTURE.
3. Turn the red VR on the focus pack all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
4. Next gradually turn it to the left to the position where the retrace line disappears.

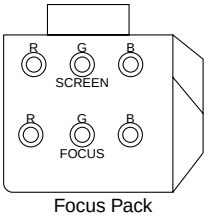


Fig. 4-1

4-2. SCREEN (G2) ADJUSTMENT

1. Turn on the power of the set.
2. Select VIDEO1 mode without signals.
3. Supply DC 175 ±0.5 V from external power supply to TP7103 (KR), TP7203 (KG) or TP7303 (KB) of CR board, CG board and CB board.
3. Adjust red, green and blue screen voltage to until retrace line disappears with screen VR on the focus pack.

4-3. FOCUS ROUGH ADJUSTMENT

1. Loose the lens screw.
2. Set in the service mode. (Refer to SECTION 6.)
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Press "①" or "④" button on the commander and select "PJE", press "⑥" three times on the Commander to display the test signal (crosshatch) on the screen.

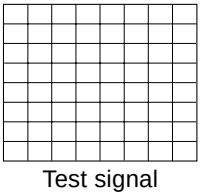


Fig. 4-2

5. Rotate the green lens and align to obtain the best lens focus at the center area.
6. Rotate the green focus VR on the focus pack and align to obtain the best electrical focus in the top right corner.
7. Perform the same alignment for red and blue lenses and electric focus.
8. Fix lens screw.

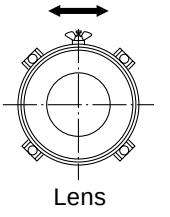


Fig. 4-3

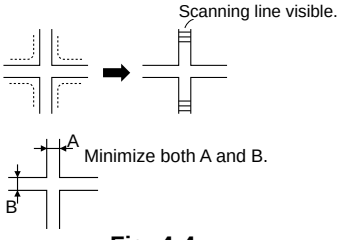
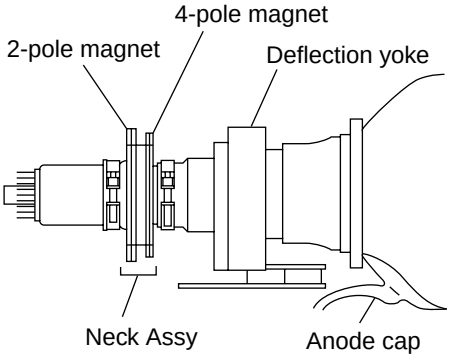


Fig. 4-4

4-4. DEFLECTION YOKE TILT ADJUSTMENT

1. Receive the Monoscope signal.
2. Place the caps on the red and blue lens so that only the green color.
3. Loosen the deflection yoke setscrew and align the tilt of the Deflection yoke so that the bars at the center of the monoscope pattern are horizontal.
4. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
5. The tilt of the deflection yoke for red and blue is aligned the same as was done for green.



Make sure deflection yoke is touching CRT closely.

Fig. 4-5

4-5. 2-POLE MAGNET ADJUSTMENT

1. Receive the Dot signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Turn the green focus VR on the focus pack to the right and set to over focus to enlarge the spot.
4. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the just focus spot.
   (center of the dot doesn't move)
5. Align the green focus VR and set for just (precise) focus.
6. Perform the same alignment for red and blue.

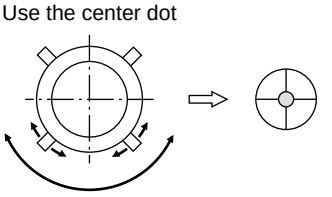


Fig. 4-6

4-6. 4-POLE MAGNET ADJUSTMENT

1. Receive the Dot signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Turn the green focus VR on the focus pack to the left and set to under focus to enlarge the spot.
4. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle.
5. Perform the same alignment for red and blue.

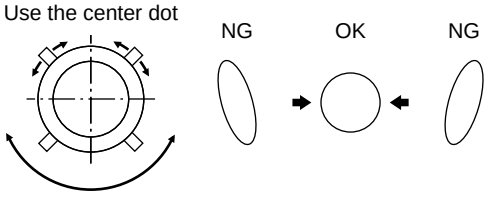


Fig. 4-7

4-7. GREEN, RED AND BLUE FOCUS ADJUSTMENT

4-7-1. Green, Red and Blue Lens Focus Adjustment

1. Receive the Monoscope signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Rotate the green lens and adjust to obtain the best lens focus at the center area.
4. Fix lens screw.
5. Repeat above process for red and blue.

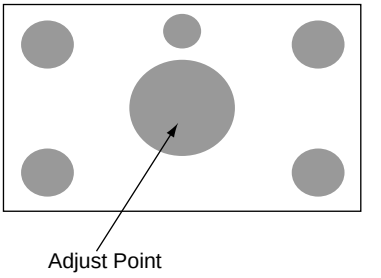


Fig. 4-8

4-7-2. Green, Red and Blue Electrical Focus Adjustment

1. Receive the Monoscope signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Rotate the green focus VR on the focus pack and adjust to obtain the best electrical focus in the adjust point.
4. Repeat above process for red and blue.
5. Repeat adjustment items 4-3. FOCUS ROUGH ADJUSTMENT, 4-5. 2-POLE MAGNET ADJUSTMENT, 4-6. 4-POLE MAGNET ADJUSTMENT and 4-7. GREEN, RED AND BLUE FOCUS ADJUSTMENT, and adjust to obtain the best focus.

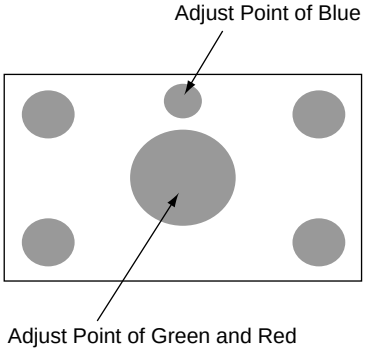


Fig. 4-9

SECTION 5
SAFETY RELATED ADJUSTMENT

When replacing the following components marked with ◪ on the schematic diagram, always check hold-down voltage and if necessary re-adjust.

Part Replaced (⋈)
R9901

Part Replaced (◪)	
D Board	C5117, C5123, C5127, C5143, D5115, D5204, Q5104, R5136, R5138, R5140, R9901, T5102, T5104, T5103 (FBT)
G Board	C6024, C6032, D6020

5-1. HV HOLD-DOWN ADJUSTMENT

1. Connect HV static voltmeter to HV Block.
2. Mount a resistor (R9901 : 43 kΩ, 1/4 W, METAL FILM) at CN5003.
3. Remove CN5002 and connect External Power Supply to CN5002 ① pin (+135 V) and ② pin (GND).
4. Turn on the set.

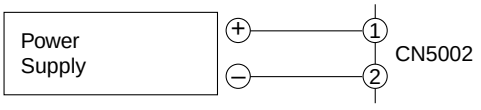


Fig. 5-1

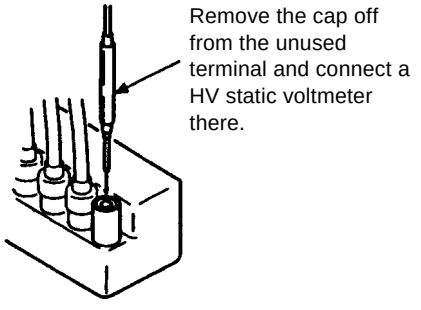


Fig. 5-2

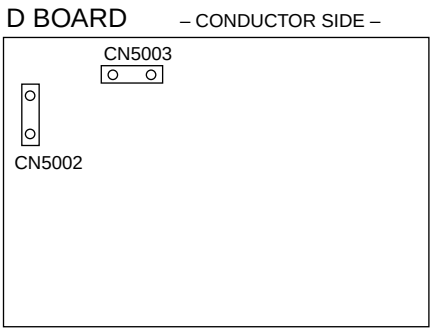


Fig. 5-3

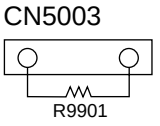


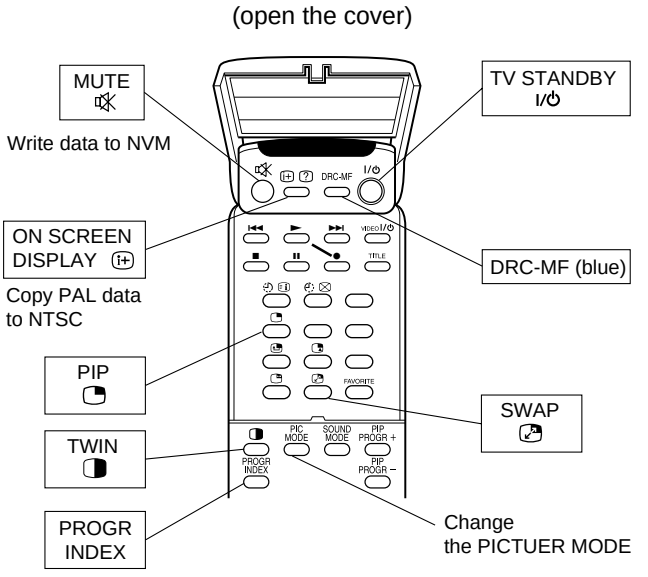
Fig. 5-4

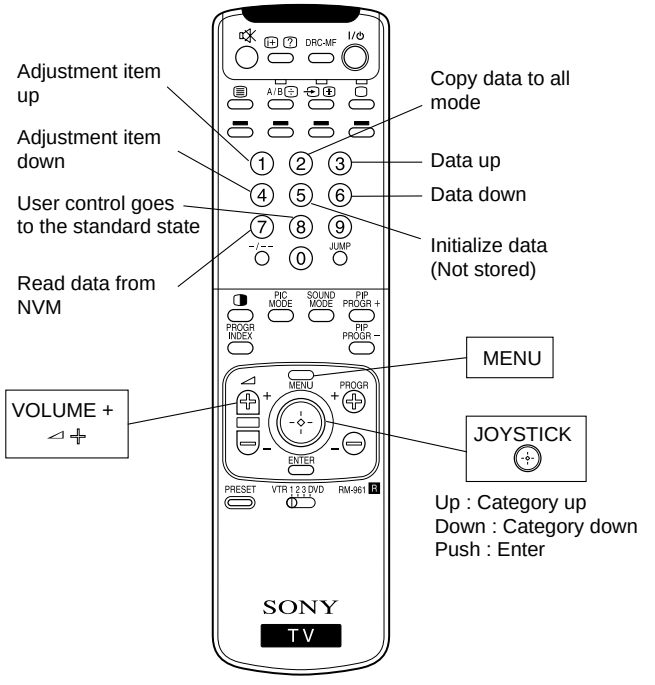
5. Receive the Dot signal and set PICTURE/BRIGHTNESS to minimum.
6. Slowly up the supply voltage from 0 V to 135 V until hold-down circuit works (picture disappear).
7. Read the HV static voltmeter of peak HV voltage.
   Spec : 33.7 ~ 35.3 kV
8. If Hold-down voltage is less than 33.7 kV then replace R9901 of 43 kΩ with that of 39 kΩ, and check if the voltage is within the spec.
9. If hold-down voltage is over than 35.3 kV then replace R9901 of 43 kΩ with that of 47 kΩ, and check if the voltage is within the spec.

SECTION 6
ELECTRICAL ADJUSTMENTS

6-1. ADJUSTMENTS WITH COMMANDER

Service adjustment to this model can performed with the supplied remote commander RM-961





RM-961

6-1-1. How to Select Each Mode

The adjustment requires the following modes:

	50 Hz (PAL)	60 Hz (NTSC)	WIDE 60 Hz (NTSC)
DRC1250	○	○	○
DRC100	○	○	×
PIP	○	○	○
TWIN	○	○	×
INDEX	○	○	×

1. Selection of Mode Between 50 Hz and 60 Hz

50 Hz : Enter the PAL signal.
60 Hz : Enter the NTSC signal.
WIDE 60 Hz : Enter the NTSC signal with video input

2. Selection of DRC Mode

1) Press “DRC-MF (blue)” button on the commander, repeatedly until displays the mode that you want to select on the screen.

Note : The DRC-MF mode is not selectable when using the “PROGRAM INDEX” or “FAVORITE CH” feature, or when the “GAME MODE”, “PIP”, or “TWIN” mode is turned “ON”.

3. Selection of WIDE mode

The WIDE mode is selected only when the DRC1250 of NTSC signal with video input mode is active.

1) Enter the NTSC signal with video input.
2) Press “DRC-MF (blue)” button on the commander to select “DRC1250”.
3) Press “MENU” button on the commander and move “⊹” up or down to enter the “FEATURE” ➧ “WIDE MODE”.
4) Move “⊹” up or down to select “ON” or “OFF”, and push “⊹ (ENTER)” button.
5) Press “MENU” button to return to normal screen.

4. Selection of PIP mode

1) Open the remote control cover, press “◔ (PIP)” button on the commander.
2) Press “◔ (PIP)” button again to return to normal screen.

5. Selection of TWIN mode

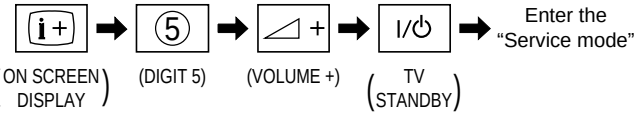
1) Press “◑ (TWIN)” button on the commander.
2) Press “◑ (TWIN)” button again to return to normal screen.

6. Selection of INDEX mode

1) Press “PROGR INDEX” button on the commander.
2) Press “PROGR INDEX” button again to return to normal screen.

6-1-2. How to Enter Service Mode

1. Turn on the main power switch to place this set in standby mode. (LED will light in red.)
2. Press the buttons on the commander as follows, and enter service mode.

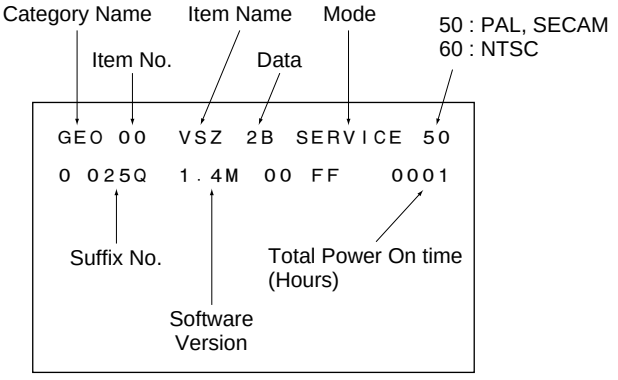


6-1-3. Method of Cancellation from Service Mode

1. Set the standby mode (Press "I/⏻ (TV STANDBY)" button on the commander), then press "I/⏻ (TV STANDBY)" button again, hereupon it becomes TV mode.

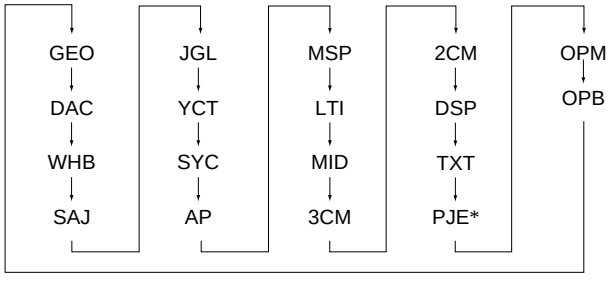
6-1-4. How to Adjustments

1. Set in the service mode, the following screen will appear.



2. Press "①" or "④" button on the commander to select the adjustment item.
3. Press "③" or "⑥" button on the commander to change the adjustment data.
4. Move "◎" up or down to select the adjustment category.

   When move "◎" up (category up), service mode changes in the order as shown below.



* : When it moves from PJE to other categrys, repeat ① or ④ button and press it.

6-1-5. How to Write the Data

1. Set in the service mode.
2. Press "①" or "④" button on the commander, select the adjustment item, and press "③" or "⑥" button to change the data.
3. Press "🔇 (MUTE)" button on the commander and it will indicate "WRITE" on the screen.
4. Press "⓪" button on the commander to write into memory. (The "WRITE" display will be changed to red color while executing, and back to "SERVICE".)

Commander Function (Except PJE mode)

Button	Mode	Description
🔇 + ⓪	WRITE	Writes data to NVM.
⑦ + ⓪	READ	Reads data from NVM.
⑧ + ⓪	NORMAL	All user control goes to the standard.
⑤ + ⓪	INITIAL	Service data initialization. Not stored. (Be sure not to use usually)
② + ⓪	COPY	Copies and writes data of DRC1250 (50Hz) mode to all other modes.
i+ + ⓪	WRT5060	Copies data of 50 Hz (PAL) mode to 60 Hz (NTSC) mode.

Note : Before changing to other modes, press "🔇 (MUTE)" + "⓪" buttons on the commander to write the data. (Omission of this operation causes the data to be returned to the data before adjustment.)

: Confirm the adjustment mode before writing data for data values because to vary in each adjustment mode.

: The adjustment item that there are no relations in the adjustment is not to change data values because all items are written in each adjustment mode.

6-1-6. Memory Write Confirmation Method

1. After adjustment, pull put the plug from AC outlet, and then plug into AC outlet again.
2. Turn the power switch ON and set in service mode.
3. Call the adjustment items again to confirm adjustments were made.

6-2. SERVICE LIST

Note

- Common : The data value of each mode commonness. Others are set up by each mode.
- ▭ : Shaded items are fixed data.
- ▭ : Though data value is indicated on the screen, it is not used.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data :
  Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

OPTION NOTE

Category : **OPM**

Item : **COM** Comb Operation Selection
00 = automatic operation (depends on color system status)
01 = no comb operation
02 = forced 2D-comb operation
03 = forced 3D-comb operation

Item : **TSY** TV System Selection for Auto TV System 00 = B/G, 01 = I, 10 = D/K, 11 = M

Item : **SSO** Speed CH Search Selection 00 = normal, 01 = 4 times, 10 = 6 times, 11 = 8 times

Item : **TRP** MPEG/JPEG Noise Reduction

Bit	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
Input	–	–	TV	Video 1	Video 2	Video 3	Video 4	DVD

Category : **OPB**

OP1	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
Item	TOP	NICAM	HDEV	(reserved)	–	DVD Input	AV Input	
Data	1	1	1	0	0	1	1	1

AV Input 00 = no AV Input 01 = 1 AV Input
10 = 3 AV Input 11 = 4 AV Input

OP2	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
Item	C-Text	Korean Stereo	Korean Mode	A-TVsys	US ST	SSV Mode	OSD Language	
Data	0	0	0	1	0	0	1	1

C-Text	Text Decoder Selection	0 = original,	1 = chinese
Korean Stereo*	Korean Stereo	0 = disabled,	1 = enabled
Video NTSC 3.58*	Video Color System	0 = Multi System,	1 = Single System
A-TVsys	Auto TV System in Auto Program	0 = disabled,	1 = enabled
US ST*	USA Stereo	0 = disabled,	1 = enabled
SSV Model	SSV-production Model	0 = original,	1 = disable PIP/TWIN/Digital
OSD Language	00 = English only,	01 = English & Chinese,	
	10 = English & Arabic/Korean*	11 = English, Chinese & Arabic/Korean*	

* : APPLICABLE FOR NTSC MODELS ONLY

V : WIDE (V-Compressed) mode

Category	Item		Function	Data Range	Standerd Data																Device Name
					50Hz (PAL)					60Hz (NTSC)							ECO Mode				
	No.	Name			DRC 1250	PIP	INDEX	TWIN	DRC 100	DRC 1250	DRC 1250 V	PIP	PIP V	INDEX	TWIN	DRC 100	ECO ON	ECO OFF	ECO ON V	ECO OFF V	
GEO	00	VSZ	V SIZE	00 ~ 3F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F					CXA2100AQ
	01	VPS	V POSITION	00 ~ 3F	23	23	1F	1F	23	1F	1F	1F	1F	1F	1F	1F					
	02	VLN	V LINEARITY	00 ~ 0F	07	07			07	07	07	07	07			07					
	03	SCO	S CORRECTION	00 ~ 0F	07	07			07	07	07	07	07			07					
	04	HSZ	H SIZE	00 ~ 3F	33	33	33	33	33	33	33	33	33	33	33	33					
	05	HPS	H POSITION	00 ~ 3F	37	37	37	37	37	37	37	37	37	37	37	37					
	06	DVH	H POSITION OFFSET FOR DVD	00 ~ 0F	09					07											
	07	PAP	PIN AMP	00 ~ 3F	22	22			22	22	22	22	22			22					
	08	UPN	UPPER CORNER PIN	00 ~ 3F	22	22	22	22	22	22	22	22	22	22	22	22					
	09	LPN	LOWER CORNER PIN	00 ~ 3F	22	22	22	22	22	22	22	22	22	22	22	22					
	0A	TRZ	TRAPEZIUM	00 ~ 0F	06	06	06	06	06	06	06	06	06	06	06	06					
	0B	AGL	AFC ANGLE	00 ~ 0F	07	07			07	07	07	07	07			07					
	0C	BOW	AFC BOW	00 ~ 0F	07	07			07	07	07	07	07			07					
	0D	LBL	LEFT H BLANKING	00 ~ 3F	34	34	34	34	34	34	34	34	34	34	34	34					
	0E	RBL	RIGHT H BLANKING	00 ~ 3F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F					
	0F	MPN	MIDDLE PIN DISTORTION COMPENSATION	00 ~ 03	00					00	00										
	10	UVL	UPPER V LINEARITY	00 ~ 0F	00					00											
	11	LVL	LOWER V LINEARITY	00 ~ 0F	00					00											
	12	HCP	HORIZONTAL HIGH VOLTAGE COMPENSATION	00 ~ 03	01					01	01										
	13	VCP	VERTICAL HIGH VOLTAGE COMPENSATION	00 ~ 03	00					00	00										
	14	VAS	V ASPECT	00 ~ 3F	2F	2F	2F	2F	2F	2F	2C	2F	2C	2F	2F	2F					
	15	VSC	V SCROLL	00 ~ 3F	1F	1F	1F	1F	1F	22	22	22	22	22	22	22					
	16	USC	UNDER-SCAN MODE ON/OFF	00, 01	00					00	01										
	17	VBW	V BLANKING WIDTH CONTROL	00 ~ 03	00	00			00	00	03	00	03			00					
	18	AT1	AKB REFERENCE TIMING	00 ~ 03	00	00			00	00	00	00	00			00					
	19	CPY	COPY THE GEO DATA TO ALL 50/60Hz NVM AREA	00, 01																	
DAC	00	HCT	H CENTER	00 ~ FF																	MB88141
	01	HLN	H LINEARITY	00 ~ 3F																	
	02	MDP	MIDDLE PIN	00 ~ 3F																	
	03	CCP	LOWER CORNER PIN	00 ~ 3F																	
	04	HTR	HORIZONTAL TRAPEZIUM	00 ~ 3F																	
	05	DF	DF ON/OFF SWITCH	00, 01																	
	06	DPH	DF PHASE	00 ~ 3F																	
	07	QPH	QP PHASE	00 ~ 3F																	
	08	QAC	QP AMPLITUDE	00 ~ 3F																	
	09	QDC	QP DC LEVEL	00 ~ 3F																	
	0A	QDV	QP V MODULATION	00 ~ 3F																	
	0B	QAV	QP AMPLITUDE MODULATION	00 ~ 3F																	
	0C	ABC	ABL D/A CONTROL	00 ~ FF													00	00	7E	7E	
	0D	CPY	COPY THE DAC DATA TO ALL 50/60Hz NVM AREA	00, 01	00																

Category	Item		Function	Data Range	Standerd Data	Device Name
	No.	Name			Common	
WHB	00	CBO	DC OFFSET CANCELLER FOR CB1	00 ~ 0F	0A	CXA2100AQ
	01	CRO	DC OFFSET CANCELLER FOR CR1	00 ~ 0F	0A	
	02	SBR	SUB BRIGHTNESS CONTROL	00 ~ 3F	25	
	03	RDR	R DRIVE	00 ~ 3F	29	
	04	GDR	G DRIVE	00 ~ 3F	29	
	05	BDR	B DRIVE	00 ~ 3F	29	
	06	RCT	R CUTOFF	00 ~ 3F	29	
	07	GCT	G CUTOFF	00 ~ 3F	1A	
	08	BCT	B CUTOFF	00 ~ 3F	29	
	09	SBO	SUB BRIGHTNESS OFFSET	00 ~ 3F	1F	
	0A	RDO	R DRIVE OFFSET	00 ~ 3F	1F	
	0B	GDO	G DRIVE OFFSET	00 ~ 3F	1F	
	0C	BDO	B DRIVE OFFSET	00 ~ 3F	1F	
	0D	RCO	R CUTOFF OFFSET	00 ~ 3F	1F	
	0E	GCO	G CUTOFF OFFSET	00 ~ 3F	1F	
	0F	BCO	B CUTOFF OFFSET	00 ~ 3F	1F	

V : WIDE (V-Compressed) mode

Category	Item		Function	Data Range	Standerd Data																	Device Name
					Common	50Hz (PAL)			60Hz (NTSC)			Twin	Index	Picture Mode				ECO Mode				
	No.	Name				TV	Video	DVD	TV	Video	DVD			Dynamic	Standard	Hi-Fine	Personal	ECO ON	ECO OFF	ECO ON V	ECO OFF V	
SAJ	00	PIC	PICTURE CONTROL	00 ~ 3F										3F	2C	1C						CXA2100AQ
	01	BRT	BRIGHTNESS CONTROL	00 ~ 3F										21	1F	1B						
	02	COL	COLOR CONTROL	00 ~ 3F										27	1F	1F						
	03	HUE	HUE CONTROL	00 ~ 3F										1F	1F	1F						
	04	SHP	SHARPNESS CONTROL	00 ~ 3F										22	1F	1D						
	05	VML	VM LEVEL	00 ~ 03										03	03	02	03					
	06	DYC	DYNAMIC COLOR ON/OFF	00, 01										01	01	00	01					
	07	CTM	COLOR TEMPERATURE FOR DYNAMIC COLOR	00, 01										00	00	00	00					
	08	CAX	COLOR MATRIX SPECIFICATION	00 ~ 03		02			00													
	09	GMA	GAMMA CORRECTION	00 ~ 03										03	03	03	03					
	0A	DCT	DC TRANSMISSION CONTROL	00 ~ 03										01	00	00	00					
	0B	DPL	AUTO PEDESTAL LEVEL CONTROL	00 ~ 03										02	01	00	01					
	0C	ABM	ABL MODE CONTROL	00 ~ 03										01	00	00	00					
	0D	ABT	ABL CURRENT DETECTION Vth CONTROL	00 ~ 03														02	00	02	00	
	0E	CLO	COLOR OFFSET	00 ~ 0F		07	07		0C	0C												
	0F	CLW	COLOR STEP WIDTH TO THE CHANGE OF S/N	00 ~ 07	01																	
	10	HUO	HUE OFFSET	00 ~ 0F		08	08		09	09												
	11	SHO	SHARPNESS OFFSET	00 ~ 1F		0F	0F	0F	0C	0F	0F											
	12	SHW	SHARPNESS STEP WIDTH TO THE CHANGE OF S/N	00 ~ 07	01																	
	13	PIO	PICTURE OFFSET FOR TWIN/INDEX	00 ~ 07								07	07									
	14	BRO	BRIGHTNESS OFFSET	00 ~ 0F														07	07	07	07	
JGL	00	PON	RGB AND AKB REFERENCE PULSE OUTPUT ON/OFF	00, 01	01																	CXA2100AQ
	01	RGB	RGB OUTPUT SELECTION	00 ~ 07	07																	
	02	AGG	AGING MODE SELECTION	00 ~ 03	00																	
	03	DPS	Y/C DELAY LINE PASS MODE SWITCH	00, 01	00																	
	04	BBT	RGB BOTTOM LIMITTER CONTROL	00 ~ 03	03																	
	05	LML	RGB AMPLITUDE LIMITTER CONTROL	00 ~ 03	00																	
	06	PAB	DC LEVEL FOR PEAK ABL	00 ~ 0F	0F																	
	07	SCO	SUB PICTURE CONTROL	00 ~ 0F	07																	
	08	LV2	RGB LEVEL FOR RGB2	00 ~ 0F	06																	
	09	SF0	SHARPNESS CIRCUIT F0	00, 01		01	01	01	01	01	01											
	0A	PRO	PRE/OVER-SHOOT RATIO CONTROL	00 ~ 03		00	03	03	03	03	03											
	0B	LTI	LUMINANCE TRANSIENT IMPROVEMENT	00 ~ 03										02	02	00	02					
	0C	CTI	CHROMINANCE TRANSIENT IMPROVEMENT	00 ~ 03										01	01	00	01					

Category	Item		Function	Data Range	Standerd Data												Device Name
					Common	2D Comb	3D Comb	S-Input	others	TV		Video		DVD			
	No.	Name								50Hz (PAL)	60Hz (NTSC)	50Hz (PAL)	60Hz (NTSC)	50Hz (PAL)	60Hz (NTSC)		
YCT	00	TNT	TINT ADJUSTMENT FOR NTSC	00 ~ 3F						24		1F					CXA2123Q
	01	PNG	PAL/NTSC GATE WIDTH	00, 01	01												
	02	PNI	PAL/NTSC SENSITIVITY SW	00, 01	00												
	03	SCL	SUB COLOR CONTROL	00 ~ 0F						07	07	07	07				
	04	SCT	SUB CONTRAST CONTROL	00 ~ 0F						08	07	08	07				
	05	SF0	SHARPNESS CENTER FREQUENCY CHANGING	00 ~ 03	02												
	06	SEQ	SHARPNESS EQUALIZER CHARACTERISTIC	00 ~ 03	03												
	07	SHG	SHARPNESS GAIN CONTROL	00 ~ 0F						05	06	05	06	05	05		
	08	YOL	Y-OUTPUT LEVEL CONTROL	00 ~ 3F	1F												
	09	BSP	BLACK STRETCH START POINT CHANGING	00 ~ 03	00												
	0A	COL	CB/CR OUTPUT LEVEL CONTROL	00 ~ 3F	1A												
	0B	DCR	DC RESTORATION RATIO ADJUSTMENT	00 ~ 03	00												
	0C	BF0	BPF/TQF F0 ADJUSTMENT	00 ~ 03	01												
	0D	BFQ	BPF/TQF Q ADJUSTMENT	00 ~ 03	02												
	0E	FSW	BPF/TQF SWITCH	00, 01	01												
	0F	SDT	SECAM DOUBLE TRAP SWITCH	00, 01	01												
	10	LPF	Y/CB/CR LPF SWITCH	00, 01	01												
	11	YDL	Y-DL TIME ADJUSTMENT	00 ~ 0F		06	05	05	03								
	12	CMT	CB/CR OUTPUT MUTE SWITCH	00, 01	00												
	13	BO1	CB OFFSET ADJUSTMENT (MAIN ROUTE)	00 ~ 0F	07												
	14	RO1	CR OFFSET ADJUSTMENT	00 ~ 0F	07												
	15	CDF	V COUNT DOWN FREQUENCY SWITCH	00 ~ 07	00												
	16	CDM	V COUNT DOWN JUDGE SWITCH	00 ~ 03	00												
	17	AFC	AFC SENSITIVITY SWITCH	00 ~ 03								00		00			
	18	MVM	MACROVISION MASK + AFC MASK	00, 01	00												
	19	SRY	SECAM R-Y BLACK ADJUSTMENT	00 ~ 0F	07												
	1A	SBY	SECAM B-Y BLACK ADJUSTMENT	00 ~ 0F	01												
	1B	BEL	SECAM BELL/HPF SWITCHING	00 ~ 03	02												
	1C	BLF	BELL F0 ADJUSTMENT	00, 01	00												
	1D	SVI	SECAM V-ID SWITCH	00, 01	00												
	1E	SGP	SECAM GATE POSITION ADJUSTMENT	00 ~ 03	00												
	1F	SID	SECAM SENSITIVITY SWITCH	00, 01	01												
	20	SIH	SECAM INHIBITION SWITCH	00, 01	00												
	21	STP	Y BLACK LEVEL SETUP FOR PAL PLUS	00, 01	00												
	22	HVC	H-VCO TEMPERATURE CHARACTER CANCELLING	00 ~ 03	02												
	23	3NR	3D NR OPERATION ON/OFF	00, 01	01												
	24	BW6	3D NR FOR 60Hz NON-BURST SIGNAL ON/OFF	00, 01	01												
	25	WSH	SHARPNESS GAIN STEP FOR NOISE REDUCTION	00 ~ 03	00												
	26	WCO	CB/CR OUTPUT LEVEL STEP FOR NOISE REDUCTION	00 ~ 03	00												

Category	Item		Function	Data Range	Standerd Data										Device Name
					Common	S-Input	Col Mode			TV		Video		DVD	
	No.	Name					SECAM	NTSC	PAL	50Hz (PAL)	60Hz (NTSC)	50Hz (PAL)	60Hz (NTSC)		
SYC	00	TNT	TINT ADJUSTMENT FOR NTSC	00 ~ 3F						21		20			CXA2123Q
	01	PNG	PAL/NTSC GATE WIDTH	00, 01	01										
	02	PNI	PAL/NTSC SENSITIVITY SW	00, 01	00										
	03	SCL	SUB COLOR CONTROL	00 ~ 0F						06	06	07	07		
	04	SCT	SUB CONTRAST CONTROL	00 ~ 0F						08	07	08	07		
	05	SF0	SHARPNESS CENTER FREQUENCY CHANGING	00 ~ 03	02										
	06	SEQ	SHARPNESS EQUALIZER CHARACTERISTIC	00 ~ 03	03										
	07	SHG	SHARPNESS GAIN CONTROL	00 ~ 0F	07										
	08	YOL	Y-OUTPUT LEVEL CONTROL	00 ~ 3F	1F										
	09	BSP	BLACK STRETCH START POINT CHANGING	00 ~ 03	00										
	0A	COL	CB/CR OUTPUT LEVEL CONTROL	00 ~ 3F	1A										
	0B	DCR	DC RESTORATION RATIO ADJUSTMENT	00 ~ 03	00										
	0C	BF0	BPF/TQF F0 ADJUSTMENT	00 ~ 03	01										
	0D	BFQ	BPF/TQF Q ADJUSTMENT	00 ~ 03	02										
	0E	FSW	BPF/TQF SWITCH	00, 01	01										
	0F	SDT	SECAM DOUBLE TRAP SWITCH	00, 01	01										
	10	LPF	Y/CB/CR LPF SWITCH	00, 01	01										
	11	YDL	Y-DL TIME ADJUSTMENT	00 ~ 0F		05	03	02	03						
	12	NCM	1-H ADDITION SWITCH	00, 01	01										
	13	CMT	CB/CR OUTPUT MUTE SWITCH	00, 01	00										
	14	BO1	CB OFFSET ADJUSTMENT (MAIN ROUTE)	00 ~ 0F	07										
	15	RO1	CR OFFSET ADJUSTMENT	00 ~ 0F	07										
	16	CDF	V COUNT DOWN FREQUENCY SWITCH	00 ~ 07	00										
	17	CDM	V COUNT DOWN JUDGE SWITCH	00 ~ 03	00							00		00	
	18	AFC	AFC SENSITIVITY SWITCH	00 ~ 03											
	19	MVM	MACROVISION MASK + AFC MASK	00, 01	00										
	1A	SRY	SECAM R-Y BLACK ADJUSTMENT	00 ~ 0F	07										
	1B	SBY	SECAM B-Y BLACK ADJUSTMENT	00 ~ 0F	01										
	1C	BEL	SECAM BELL/HPF SWITCHING	00 ~ 03	02										
	1D	BLF	BELL F0 ADJUSTMENT	00, 01	00										
	1E	SVI	SECAM V-ID SWITCH	00, 01	00										
	1F	SGP	SECAM GATE POSITION ADJUSTMENT	00 ~ 03	00										
	20	SID	SECAM SENSITIVITY SWITCH	00, 01	01										
	21	SIH	SECAM INHIBITION SWITCH	00, 01	00										
	22	STP	Y BLACK LEVEL SETUP FOR PAL PLUS	00, 01	00										
	23	HVC	H-VCO TEMPERATURE CHARACTER CANCELLING	00 ~ 03	02										

Category	Item		Function	Data Range	Standerd Data									Device Name
	No.	Name			Common	Sur VDD	Sur VDP	Sur TRS	Sur SIM	Sur OFF	Dynamic	Drama	Soft	
AP	00	BAS	BASS CONTROL	00 ~ 0F							0B	0A	07	TDA7315
	01	TRE	TREBLE CONTROL	00 ~ 0F							0A	09	07	
	02	LDN	LOUDNESS ON/OFF	00, 01	01									

Sur : Surround mode
VDD : Virtual Dolby Digital
VDP : Virtual Dolby Prologic
TRS : Tru Surround
SIM : Simulated

Category	Item		Function	Data Range	Standerd Data	Device Name
	No.	Name			Common	
MSP	00	WST	W/G STEREO THRESHOLD	00 ~ FF	15	MSP3415D
	01	WBT	W/G BILINGUAL THRESHOLD	00 ~ FF	EA	
	02	WLL	W/G MONAURAL THRESHOLD	00 ~ FF	05	
	03	WAC	W/G AGREEMENT COUNT	00 ~ 0F	01	
	04	WDL	W/G SEARCH DELAY	00 ~ FF	30	
	05	NDL	NICAM SEARCH DELAY	00 ~ FF	20	
	06	SDL	STEREO STATUS READ DELAY	00 ~ FF	10	
	07	AGC	AGC SWITCH AUTO/CONSTANT	00, 01	01	
	08	REL	AGC GAIN AT CONSTANT MODE	00 ~ 3F	28	
	09	CRM	CARRIER MUTING ON/OFF	00, 01	00	
	0A	ACO	AUDIO CLOCK OUT ON/OFF	00, 01	01	
	0B	FP	FM PRESCALE FOR NON-M SYSTEM	00 ~ 7F	1B	
	0C	FPM	FM PRESCALE FOR M SYSTEM	00 ~ 7F	32	
	0D	FH	FM PRESCALE FOR HDEV	00 ~ 7F	2D	
	0E	FHM	FM PRESCALE FOR HDEV AND M	00 ~ 7F	65	
	0F	WGP	W/G PRESCALE	00 ~ 7F	2A	
	10	NIP	NICAM PRESCALE	00 ~ 7F	6D	
	11	ERR	AUTO FM SWITCH THRESHOLD	00 ~ FF	50	
	12	VOL	LOUD SPEAKER GAIN 0700h to 07FFh	00 ~ FF	6D	

Category	Item		Function	Data Range	Standerd Data								Device Name
					Common	Twin	TV	Video	Picture Mode				
	No.	Name							Dynamic	Standard	Hi-Fine	Personal	
LTI	00	LDH	HISTOGRAM SEGMENT SELECTION	00, 01	01								TDA9178
	01	CFS	CONTOUR FILTER SELECTION	00, 01	01								
	02	WLB	LETTERBOX WINDOW SWITCH	00, 01	00								
	03	VDC	VIDEO DEPENDENT CORING	00, 01					01	01	01	01	
	04	DEM	DEMONSTRATION MODE	00, 01	00								
	05	CDP	LUMINANCE DELAY	00 ~ 07	04								
	06	OSP	OVERRULE SMART PEAKING	00, 01	00								
	07	WPO	WHITE POINT STRETCH OFF	00, 01	00								
	08	DSK	SKIN TONE SWITCH	00, 01					00	00	00	00	
	09	ASK	SKIN TONE ANGLE SELECTION	00, 01	00								
	0A	WSK	SKIN TONE WIDTH SELECTION	00, 01	00								
	0B	SSK	SKIN TONE SIZE SELECTION	00, 01	00								
	0C	DGR	GREEN ENHANCEMENT SWITCH	00, 01		00			*	01	00	01	
	0D	DGT	THRESHOLD OF GREEN ENHANCEMENT SWITCH	00 ~ 07	07								
	0E	GGR	GREEN ENHANCEMENT GAIN	00, 01	00								
	0F	WGR	GREEN ENHANCEMENT WIDTH	00, 01	00								
	10	SGR	GREEN ENHANCEMENT SIZE	00, 01	00								
	11	DBL	BLUE STRETCH SWITCH	00, 01	00								
	12	GBL	BLUE STRETCH GAIN SELECTION	00, 01	00								
	13	SBL	BLUE STRETCH SIZE SELECTION	00, 01	00								
	14	CDS	COLOR DEPENDENT SHARPNESS	00, 01					01	01	01	01	
	15	CST	THRESHOLD OF COLOR DEPENDENT SHARPNESS	00 ~ 07	07								
	16	CTI	COLOR TRANSIENT IMPROVEMENT	00, 01					00	00	00	00	
	17	BON	BLACK OFFSET COMPENSATION	00, 01					00	00	00	00	
	18	BTD	ADAPTIVE BLACK STRETCH	00 ~ 3F					00	00	00	00	
	19	NLD	NON-LINEARITY AMPLIFIER	00 ~ 3F		00			13	13	05	13	
	1A	NLW	STEP WIDTH OF NON-LINEARITY AMPLIFIER	00 ~ 07	07								
	1B	VGD	VARIABLE GAMMA	00 ~ 3F		1F			15	15	1A	15	
	1C	VGW	STEP WIDTH OF VARIABLE GAMMA	00 ~ 07	00								
	1D	PKD	PEAKING AMPLITUDE	00 ~ 3F					32	32	1D	32	
	1E	PKW	STEP WIDTH OF PEAKING AMPLITUDE	00 ~ 0F	08								
	1F	SPD	STEEPNESS CORRECTION	00 ~ 3F					00	00	00	00	
	20	CRD	CORING LEVEL	00 ~ 3F					14	0D	05	14	
	21	CRW	STEP WIDTH OF CORING LEVEL	00 ~ 0F	09								
	22	CRO	CORING LEVEL OFFSET FOR VIDEO MODE	00 ~ 0F	05								
	23	LWD	LINE WIDTH CORRECTION	00 ~ 3F	1F								
	24	SNM	S/N MODE UNDER UNRELIABLE S/N CONDITION	00 ~ 07	00								
	25	SNC	S/N RATIO AVERAGE COUNTER	00 ~ 0F			03	03					
	26	FMC	FEATURE MODE MATCHING COUNTER	00 ~ 0F	02								

* Mark Data Value GE/HK/ME model: 01
AUS model: 00

Category	Item		Function	Data Range	Standerd Data										Device Name
					50 Hz (PAL)					60 Hz (NTSC)					
	No.	Name			DRC1250	PIP	TWIN	INDEX	DRC100	DRC1250	PIP	TWIN	INDEX	DRC100	
MID	00	HPH	HORIZONTAL ACTIVE DISPLAY AREA PHASE	00 ~ FF	3E	3E	7B	78	3E	49	49	6F	6C	49	MB94918
	01	VPH	VERTICAL ACTIVE DISPLAY AREA PHASE	00 ~ 3F	15	15	20	1A	0C	25	25	2E	2D	13	
	02	HSZ	HORIZONTAL ACTIVE DISPLAY AREA SIZE	00 ~ FF	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F	
	03	VSZ	VERTICAL ACTIVE DISPLAY AREA SIZE	00 ~ FF	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F	
	04	HPW	DISPLAY H-SYNC PULSE WIDTH	00 ~ 3F	3F	3F	3F	3F	3F	3F	3F	3F	3F	3F	
	05	VPW	DISPLAY V-SYNC PULSE WIDTH	00 ~ 07	03	03	03	03	03	03	03	03	03	03	
	06	YDL	DISPLAY OUTPUT Y/C DELAY CORRECTION	00 ~ 3F	00	00	00	00	00	00	00	00	00	00	
	07	MHP	MAIN PICTURE HORIZONTAL POSITION (SINGLE & PIP)	00 ~ FF	7F	7F			7F	7F	7F			7F	
	08	MVP	MAIN PICTURE VERTICAL POSITION (SINGLE & PIP)	00 ~ FF	7F	7F			7F	7F	7F			7F	
	09	MHS	MAIN PICTURE HORIZONTAL SIZE (SINGLE & PIP)	00 ~ FF	7F	7F			7F	7F	7F			7F	
	0A	MVS	MAIN PICTURE VERTICAL SIZE (SINGLE & PIP)	00 ~ FF	7F	7F			7F	7F	7F			7F	
	0B	PHP	PIP SUB PICTURE HORIZONTAL POSITION	00 ~ FF		6B					53				
	0C	PVP	PIP SUB PICTURE VERTICAL POSITION	00 ~ FF		5E					57				
	0D	PHS	PIP SUB PICTURE HORIZONTAL SIZE	00 ~ FF		7F					7F				
	0E	PVS	PIP SUB PICTURE VERTICAL SIZE	00 ~ FF		7F					7F				
	0F	PHO	PIP SUB PICTURE HORIZONTAL POSITION OFFSET	00 ~ FF		76					68				
	10	PVO	PIP SUB PICTURE VERTICAL POSITION OFFSET	00 ~ FF		6E					6B				
	11	TMP	TWIN MAIN PICTURE HORIZONTAL POSITION	00 ~ 03			01								
	12	TSP	TWIN SUB PICTURE HORIZONTAL POSITION	00 ~ FF			00								
	13	TVP	TWIN MAIN & SUB PICTURE VERTICAL POSITION	00 ~ FF											
	14	THS	TWIN MAIN & SUB PICTURE HORIZONTAL SIZE	00 ~ FF											
	15	TVS	TWIN MAIN & SUB PICTURE VERTICAL SIZE	00 ~ FF											
	16	THO	TWIN MAIN & SUB PICTURE HORIZONTAL POSITION OFFSET	00 ~ FF											
	17	TVO	TWIN MAIN & SUB PICTURE VERTICAL POSITION OFFSET	00 ~ FF											
	18	XHS	INDEX SUB PICTURE HORIZONTAL SIZE	00 ~ FF											
	19	XVS	INDEX SUB PICTURE VERTICAL SIZE	00 ~ FF											
	1A	XHG	INDEX HORIZONTAL GAP WIDTH BETWEEN PICTURES	00 ~ FF											
	1B	XVG	INDEX VERTICAL GAP WIDTH BETWEEN PICTURES	00 ~ FF											
	1C	XHP	INDEX 1st SUB PICTURE HORIZONTAL POSITION	00 ~ FF											
	1D	XVP	INDEX 1st SUB PICTURE VERTICAL POSITION	00 ~ FF											
	1E	DHP	DRC HORIZONTAL ACTIVE AREA POSITION	00 ~ FF	7F		7F		7F	7F		7F		7F	
	1F	DHS	DRC HORIZONTAL ACTIVE AREA PIXEL SIZE	00 ~ FF	7F		7F		7F	7F		7F		7F	
	20	DVP	DRC VERTICAL ACTIVE ARE LINE POSITION	00 ~ 3F	1A		3F		1A	1A		39		1A	
	21	DVS	DRC VERTICAL ACTIVE AREA LINE SIZE	00 ~ FF	7F		7F		7F	7F		7F		7F	
	22	VHP	VDO HORIZONTAL ACTIVE AREA POSITION	00 ~ FF		7F					7F				
	23	VHS	VDO HORIZONTAL ACTIVE AREA PIXEL SIZE	00 ~ FF		7F					7F				
	24	VEP	VDO VERTICAL ACTIVE AREA EVEN POSITION	00 ~ 3F		1E					1B				
	25	VVS	VDO VERTICAL ACTIVE AREA LINE SIZE	00 ~ FF		7F					7F				
	26	VOP	VDO VERTICAL ACTIVE AREA ODD POSITION	00 ~ 03		00					00				
	27	CLT	VDO CLAMP PULSE OUTPUT TIMING	00 ~ FF		7F					7F				
	28	CLW	VDO CLAMP PULSE WIDTH	00 ~ 07		04					04				
	29	VYD	VDO ANALOG INPUT Y/C DELAY CORRECTION	00 ~ 3F		00					00				
	2A	VCR	VDO CHROMA SIGNAL ORDER	00, 01		01					01				
	2B	VDI	VDO DIGITAL ANGLE INPUT SELECTION	00 ~ 03		01					01				

Category	Item		Function	Data Range	Standerd Data												Device Name
					Common	TV	Video	NR Mode				Picture Mode				
	No.	Name						NR Mode 0	NR Mode 1	NR Mode 2	NR Mode 3	Dynamic	Standard	Hi-Fine	Parsonal	
3CM	00	FRZ	EXTERNAL MEMORY TEST BIT	00, 01	00											µPD64082
	01	NRM	NOISE REDUCTION OPERATION MODE	00 ~ 03	00											
	02	YCO	Y/C SINGLE OUTPUT SELECTION	00 ~ 0F	0D											
	03	SYC	SYSTEM CLOCK SELECTION	00 ~ 03	01											
	04	STD	STANDARD/NON-STANDARD OPERATION SELECTION	00 ~ 03	00											
	05	MSS	INTER-FRAME/INTER-LINE OPERATION SELECTION	00 ~ 03	00											
	06	KIL	KILLER/NON-KILLER OPERATION SELECTION	00 ~ 03	03											
	07	EAD	EXTERNAL Y-ADC SWITCH	00, 01	00											
	08	ECS	EXTERNAL C-SYNC INPUT SELECTION	00 ~ 03	01											
	09	CPP	ADC INPUT LEVEL & CLUMP PULSE WIDTH SELECTION	00 ~ 03	02											
	0A	PWR	ADC INPUT WIDTH SWITCH	00, 01	00											
	0B	HDP	HORIZONTAL PHASE ADJUSTMENT	00 ~ 07	05											
	0C	CDL	C-SIGNAL DELAY ADJUSTMENT	00 ~ 07	04											
	0D	DYC	DY DETECTION CORING LEVEL ADJUSTMENT	00 ~ 0F				02	02	02	04					
	0E	DYG	DY DETECTION GAIN ADJUSTMENT	00 ~ 0F				0A	0A	0A	0A					
	0F	DCC	DC DETECTION CORING LEVEL ADJUSTMENT	00 ~ 0F				05	03	03	05					
	10	DCG	DC DETECTION GAIN ADJUSTMENT	00 ~ 0F				05	0A	0A	05					
	11	YNR	YNR NON-LINEAR FILTER SETUP	00 ~ 0F	01											
	12	CNR	CNR NON-LINEAR FILTER SETUP	00 ~ 0F	01											
	13	WSC	NOISE DETECTION CORING ADJUSTMENT	00 ~ 03	01											
	14	VTH	HYSTERESIS SELECTION FOR H-SYNC NON-STANDARD	00 ~ 03		01	01									
	15	VTR	SENSITIVITY SELECTION FOR H-SYNC NON-STANDARD	00 ~ 03		01	01									
	16	LDR	SENSITIVITY SELECTION FOR FRAME-SYNC NON-STANDARD	00 ~ 03		02	01									
	17	VAP	GAIN ADJUSTMENT FOR VERTICAL SHAPE CORRECTION	00 ~ 07								03	02	00	02	
	18	VAI	VANISHING ADJUSTMENT FOR VERTICAL SHAPE CORRECTION	00 ~ 1F								0C	06	00	06	
	19	TST	TEST BIT	00, 01	00											
	1A	YPF	CENTER FREQUENCY SELECTION FOR Y-PEAKING BPF	00 ~ 03								03	03	03	03	
	1B	YPG	GAIN ADJUSTMENT FOR Y-PEAKING BPF	00 ~ 0F								08	08	08	08	
	1C	VSE	LINE COMB FILTER SETUP	00 ~ 0F	0A											
	1D	CCN	C-SIGNAL SPLIT FILTER SWITCH	00, 01	00											
	1E	COS	C-SIGNAL DELAY SWITCH AT NOISE REDUCTION	00, 01	00											
	1F	SDC	DC DETECTION SENSITIVITY SWITCH	00, 01	00											

Category	Item		Function	Data Range	Standerd Data											Device Name
					Common	TV	Video	NR Mode				Picture Mode				
	No.	Name						NR Mode 0	NR Mode 1	NR Mode 2	NR Mode 3	Dynamic	Standard	Hi-Fine	Parsonal	
3CM	20	SDY	DY DETECTION LOWER-LEVEL SENSITIVITY SWITCH	00, 01	01											µPD64082
	21	D2G	D2 GAIN SELECTION	00 ~ 07	04											
	22	YHC	Y-SIGNAL HIGHER-LEVEL CORING SELECTION	00 ~ 03								00	00	00	00	
	23	YHG	Y-SIGNAL HIGHER-LEVEL GAIN SWITCH	00, 01								00	00	00	00	
	24	SHT	NON-STANDARD DETECTION & H/V COUNTER TEST BITS	00 ~ 0F	00											
	25	CLK	CLOCK TEST BITS	00 ~ 0F	08											
	26	PLL	PLL FILTER SETUP	00 ~ 0F	0D											
	27	KRF	KILLER DETECTION REFERENCE ADJUSTMENT	00 ~ 0F	03											
	28	HSL	H-SYNC SLICE LEVEL ADJUSTMENT	00 ~ 0F	0C											
	29	VSL	V-SYNC SLICE LEVEL ADJUSTMENT	00 ~ 0F	08											
	2A	BPS	INTERNAL BURST GATE START POSITION ADJUSTMENT	00 ~ 0F	04											
	2B	BPW	INTERNAL BURST GATE WIDTH ADJUSTMENT	00 ~ 0F	0A											
	2C	ADC	ADC CLOCK DELAY SELECTION	00 ~ 03	03											
	2D	APD	ADC POWER-DOWN SWITCH	00, 01	01											
	2E	NSD	NON-STANDARD DETECTION TEST BIT	00, 01	01											
	2F	SPD	MEMORY POWER-DOWN SWITCH	00 ~ 03	02											
	30	CNT	CNR TEST BIT	00, 01	00											
2CM	00	APA	2D COMB APACON ON/OFF	00, 01												CXA2069Q

Category	Item		Function	Data Range	Standerd Data									Device Name
	No.	Name			Common	Sur VDD	Sur VDP	Sur TRS	Sur SIM	Sur OFF	Dynamic	Drama	Soft	
DSP	00	DUL	DIR UNLOCK DETECTION MODE	00 ~ 03										
	01	DIM	DIGITAL INPUT MODE	00 ~ 03										
	02	TFM	TruSurround FRONT MINUS	00 ~ 7F										
	03	TFP	TruSurround FRONT PLUS	00 ~ 7F										
	04	TCE	TruSurround CENTER	00 ~ 7F										
	05	TS1	TruSurround SURROUND #1	00 ~ FF										
	06	TS2	TruSurround SURROUND #2	00 ~ 7F										
	07	TSP	TruSurround SURROUND PLUS	00 ~ 7F										
	08	TSM	TruSurround SURROUND MINUS	00 ~ 7F										
	09	LFE	LOW FREQUENCY EFFECT	00 ~ 7F										
	0A	BHL	BBE EFFECT 1 FOR BBE HIGH	00 ~ 7F										
	0B	BHH	BBE EFFECT 2 FOR BBE HIGH	00 ~ 7F										
	0C	BLL	BBE EFFECT 1 FOR BBE LOW	00 ~ 7F										
	0D	BLH	BBE EFFECT 2 FOR BBE LOW	00 ~ 7F										
	0E	DLR	DELAY SELECTION AT DSP RESET (100msec to 1500msec)	00 ~ 07										
	0F	BBE	BBE SELECTION	00 ~ 03										

Sur : Surround mode
VDD : Virtual Dolby Digital
VDP : Virtual Dolby Prologic
TRS : Tru Surround
SIM : Simulated

Category	Item		Function	Data Range	Standard Data			Device Name
	No.	Name			Common	50 Hz (PAL)	60 Hz (NTSC)	
TXT	00	TXH	TELETEXT HORIZONTAL POSITION	00 ~ FF	61			SAA5261
	01	TXV	TELETEXT VERTICAL POSITION	00 ~ 3F	0E			

Category : PJE ☐ : Fixed data

Item Number	Adjustment Item	Data Range	Standard Data					Name/Description
			DRC1250 (PAL)	DRC100 (PAL)	DRC1250 (NTSC)	DRC100 (NTSC)	DRC1250 VC (NTSC)	
00	FDIS	00,01			00			SELECT REGI DATA DISPLAY OF FINE ADJ
01	OSDH	01 ~ 255	32	32	32	32	32	PJED SERVICE MENU H POSITION
02	OSDV	01 ~ 255	75	55	75	55	65	PJED SERVICE MENU V POSITION
03	FVST	00 ~ 255	54	33	54	33	54	LINE NUMBER OF FINE ADJUST START
04	V1ST	00 ~ 255	00	00	00	00	00	V1 START DATA
05	V1CU	00 ~ 255	25	50	29	58	29	V1 COUNT UP DATA
06	COHP	00 ~ 255	00	00	00	00	00	H-PHASE OF ROUGH ADJ
07	FIHP	00 ~ 255	203	203	203	203	203	H-PHASE OF FINE ADJ
08	TPHP	00 ~ 255	51	51	51	51	51	H-PHASE OF TEST PATTERN
09	DFHP	00 ~ 255	00	00	00	00	00	H-PHASE OF DYNAMIC FOCUS
10	DFHG	–128 ~ 127	–80	–80	–80	–80	–80	H-2 GAIN OF DYNAMIC FOCUS
11	DFVG	–128 ~ 127	–30	–30	–30	–30	–30	V-2 GAIN OF DYNAMIC FOCUS
12	PWM1	00 ~ 255			00			PWM1
13	PWM2	00 ~ 255			29			H-PHASE OF AUTO REGI TEST PATTERN
14	HBLD	00 ~ 255			00			H-PHASE OF RETURNED BLUE V LINE
15	HBLW	00 ~ 63			00			PULSE WIDTH OF RETURNED BLUE V LINE
16	BLKP	00 ~ 255			44			START BLANK PULSE
17	COGV	–128 ~ 127			(*1)			GREEN V CENT OFFSET DATA OF AUTO REGI
18	CORV	–128 ~ 127			(*1)			RED V CENT OFFSET DATA OF AUTO REGI
19	COBV	–128 ~ 127			(*1)			BLUE V CENT OFFSET DATA OF AUTO REGI
20	COGH	–128 ~ 127			(*1)			GREEN H CENT OFFSET DATA OF AUTO REGI
21	CORH	–128 ~ 127			(*1)			RED H CENT OFFSET DATA OF AUTO REGI
22	COBH	–128 ~ 127			(*1)			BULE H CENT OFFSET DATA OF AUTO REGI
23	SOGV	–128 ~ 127			(*1)			GREEN V SKEW OFFSET DATA OF AUTO REGI
24	SORV	–128 ~ 127			(*1)			RED V SKEW OFFSET DATA OF AUTO REGI
25	SOBV	–128 ~ 127			(*1)			BLUE V SKEW OFFSET DATA OF AUTO REGI
26	SOGH	–128 ~ 127			(*1)			GREEN H SKEW OFFSET DATA OF AUTO REGI
27	SORH	–128 ~ 127			(*1)			RED H SKEW OFFSET DATA OF AUTO REGI
28	SOBH	–128 ~ 127			(*1)			BLUE H SKEW OFFSET DATA OF AUTO REGI
29	ERR	FIXED			00			AUTO REGI ERROR CODE
30	ADTM	00 ~ 255			144			TIMING TO GET A/D DATA OF AUTO REGI
31 *2	VUP	01 ~ 255	03	03	01	01	01	AUTO REGI PATTERN UPPER V POSITION
32 *2	VMID	01 ~ 255	135	130	115	110	115	AUTO REGI PATTERN MIDDLE V POSITION
33 *2	VLOW	01 ~ 255	260	255	225	212	225	AUTO REGI PATTERN LOWER V POSITION
34 *2	HPR	01 ~ 510	03	03	01	01	03	AUTO REGI PATTERN H POSITION
35	SFTF	00,01			00			SHIFT ENABLE 00 : DISABLE 01 : ENABLE
36	SFTE	00,01			00			SHIFT FAST 00 : NORMAL 01 : QUICK
37	ACTL	00 ~ 255			00			LOWER BYTE OF COUNTER VALUE
38	ACTH	00 ~ 255			00			HIGHER BYTE OF COUNTER VALUE
GRN	CENT	–512 ~ 511			000/000			GREEN H/V CENT (H CENT *3)
	SKEW	–512 ~ 511			000/000			GREEN H/V SKEW (H SKEW *3)
	SIZE	–512 ~ 511			000/–200			GREEN H/V SIZE (H/V SIZE *3)
	LIN	–512 ~ 511			xxxx/xxxx			GREEN H/V LIN
	KEY	–512 ~ 511			xxxx/xxxx			GREEN H/V KEY
	PIN	–512 ~ 511			xxxx/270			GREEN H/V PIN
BLU	CENT	–512 ~ 511			000/000			BLUE H/V CENT
	SKEW	–512 ~ 511			000/000			BLUE H/V SKEW
	SIZE	–512 ~ 511			000/–200			BLUE H/V SIZE
	LIN	–512 ~ 511			–150/xxxx			BLUE H/V LIN
	KEY	–512 ~ 511			xxxx/–70			BLUE H/V KEY
	PIN	–512 ~ 511			xxxx/270			BLUE H/V PIN
RED	CENT	–512 ~ 511			000/000			RED H/V CENT
	SKEW	–512 ~ 511			000/000			RED H/V SKEW
	SIZE	–512 ~ 511			000/–200			RED H/V SIZE
	LIN	–512 ~ 511			150/xxxx			RED H/V LIN
	KEY	–512 ~ 511			xxxx/–70			RED H/V KEY
	PIN	–512 ~ 511			xxxx/270			RED H/V PIN

VC : WIDE (V-Compressed) MODE
*1 : Set correctly by the automatic registration adjustment.
*2 : It can be adjust if automatic registration adjustment doesn't work.
*3 : It can be adjust Green a little.
xxxx : Cannot change.

Category	Item No.	Item Name	Function	Data Range	Standard Data Common	Standard Data 50 Hz (PAL)	Standard Data 60 Hz (NTSC)	Device Name
OPM	00	OSH	OSD H POSITION	00 ~ 3F	0F			CXP750096
	01	FW1	OSD ODD/EVEN FIELD WINDOW SETUP #1	00 ~ 3F	00			OPTION-MISC
	02	FW2	OSD ODD/EVEN FIELD WINDOW SETUP #2	00 ~ 3F	03			
	03	OHO	OSD H POSITION OFFSET FOR INDEX	00 ~ 0F	07			
	04	IL1	INDEX SUB-SCREEN OSD 1st LINE VERTICAL POSITION	00 ~ 3F		22	20	
	05	IVO	INDEX SUB-SCREEN OSD VERTICAL OFFSET	00 ~ 3F		2B	20	
	06	COM	COMB OPERATION SELECTION	00 ~ 03	00			
	07	APC	APC SWITCH	00, 01	01			
	08	TSY	TV SYSTEM SELECTION UNDER SEARCHING WITH AUTO TV SYSTEM	00 ~ 03	00			
	09	MUT	NO SIGNAL MUTE	00, 01	00			
	0A	AFM	AUTO FM SWITCH	00, 01	01			
	0B	TVO	V-ANGLE CORRECTION TO PICTURE ROTATION	00 ~ 07	03			
	0C	DBL	DISABLE BLUEBACK FUNCTION	00, 01	01			
	0D	SSO	SPEED CH SEARCH SELECTION	00 ~ 03	01			
	0E	TRP	MPEG/JPEG NOISE REDUCTION FOR EACH INPUT	00 ~ 3F	00			
	0F	SCH	CH SELECTION FOR SHIPPING CONDITION	00 ~ 7F				
	10	SCA	CABLE/AIR SELECTION FOR SHIPPING CONDITION	00, 01				
	11	DMG	DISABLE MENU-OPERATION GUIDE	00, 01	00			
	12	VSN	ENABLE NOISE REDUCTION IN VIDEO MODE	00, 01	00			
OPB	00	OP1	OPTIONAL BITS 1 (SEE THE SPECIFIED SHEET)	00 ~ FF	E7			OPTION-BITS
	01	OP2	OPTIONAL BITS 2 (SEE THE SPECIFIED SHEET)	00 ~ FF	13			

6-3. Picture Quality Adjustment

6-3-1. Preparation

1. Set in the service mode.
2. Set respective items as follows.

Adjustment Condition

DRC-MF : DRC1250
PICTURE MODE : HI-FINE
TWIN MODE : ON
ECO MODE : OFF
WIDE MODE : OFF

Category	Item		Data
SAJ	00	PIC	3F
	06	DYC	00
	0E	CLO	06
	10	HUO	07
	13	PIO	00
JGL	04	BBT	00
	05	LML	03

3. Connect the oscilloscope probe to the following point on the E board.

Measurement Point

E Board CN4500 :
① pin R100 → VR
⑤ pin B100 → VB

Note : After the adjustment 6-3. Picture Quality Adjustment, these adjustment parameters must be recovered to the original condition.

Original Condition

DRC-MF : DRC1250
PICTURE MODE : HI-FINE
TWIN MODE : ON
ECO MODE : OFF
WIDE MODE : OFF

Category	Item		Data			
			50 TV	50 VIDEO	60 TV	60 VIDEO
SAJ	00	PIC	1F			
	06	DYC	00			
	0E	CLO	0C	0C	0C	0C
	10	HUO	08	08	09	09
	13	PIO	07			
JGL	04	BBT	03			
	05	LML	00			

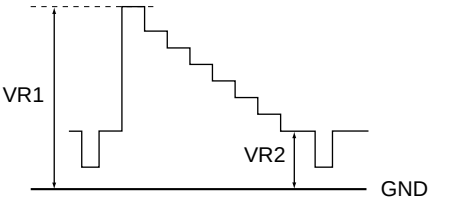
6-3-2. NTSC Video Input

1. Enter the NTSC video color bar (White & color 75%) signal.
2. Enter the service mode, and set respective items as follows.
3. Measure waveform, and each item is adjusted to become the following figure.
4. Press "(SWAP)" button on the commander, when the left screen and the right screen are changed.
5. After adjustment finished, press "(MUTE)" + "⓪" button to write the data to the NVM.

(i) SUB CONTRAST
Condition :

Category	Item		Data
SAJ	00	PIC	3F
	02	COL	00
	13	PIO	00
JGL	01	RGB	04

Adjusting Parameter :
LEFT screen : YCT 08 YOL
RIGHT screen : SYC 08 YOL

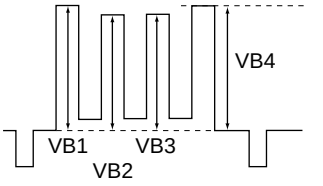


VR1 – VR2 = 1.85 ± 0.07 Vp-p

(ii) SUB HUE/SUB COL
Condition :

Category	Item		Data
SAJ	02	COL	1F
	10	HUO	07
JGL	01	RGB	07

Adjusting Parameter :
LEFT screen : YCT 0A COL
00 TNT
RIGHT screen : SYC 0A COL
00 TNT



VB1 = VB4 ± 70 mV
VB2 = VB3 ± 70 mV

6-3-3. NTSC RF Input

1. Enter the NTSC RF color bar (White & color 75%) signal.
2. Adjust with the same manner as 6-3-2. NTSC Video Input.

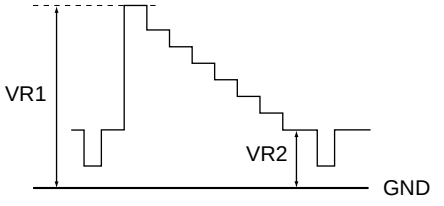
(i) SUB CONTRAST

Condition :

Category	Item		Data
SAJ	00	PIC	3F
	02	COL	00
JGL	01	RGB	04

Adjusting Parameter :

LEFT screen : YCT 04 SCT
RIGHT screen : SYC 04 SCT



VR1 – VR2 = 1.85 ± 0.07 Vp-p

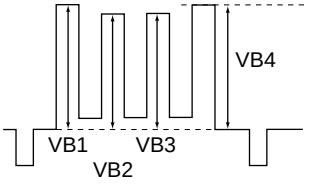
(ii) SUB HUE/SUB COL

Condition :

Category	Item		Data
SAJ	02	COL	1F
	10	HUO	07
JGL	01	RGB	07

Adjusting Parameter :

LEFT screen : YCT 03 SCL
00 TNT
RIGHT screen : SYC 03 SCL
00 TNT



VB1 = VB4 ± 70 mV
VB2 = VB3 ± 70 mV

6-3-4. PAL Video Input

1. Enter the PAL video color bar (White & color 75%) signal.
2. Adjust with the same manner as 6-3-2. NTSC Video Input.

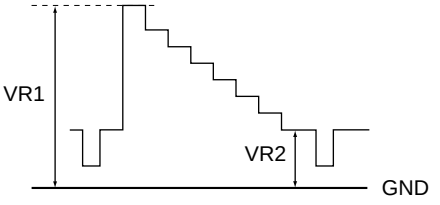
(i) SUB CONTRAST

Condition :

Category	Item		Data
SAJ	00	PIC	3F
	02	COL	00
JGL	01	RGB	04

Adjusting Parameter :

LEFT screen : YCT 04 SCT
RIGHT screen : SYC 00 SCT



VR1 – VR2 = 1.85 ± 0.07 Vp-p

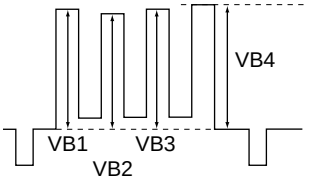
(ii) SUB HUE/SUB COL

Condition :

Category	Item		Data
SAJ	02	COL	1
JGL	01	RGB	07

Adjusting Parameter :

LEFT screen : YCT 03 SCL
RIGHT screen : SYC 03 SCL



VB1 = VB3 = VB4 ± 70 mV
VB2 = VB3 ± 70 mV

6-3-5. PAL RF Input

1. Enter the PAL RF color bar (White & color 75%) signal.
2. Adjust with the same manner as 6-3-2. NTSC Video Input.

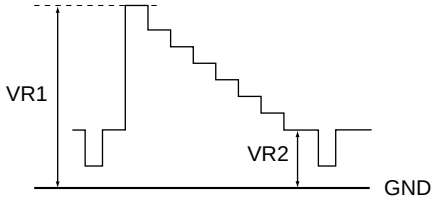
(i) SUB CONTRAST

Condition :

Category	Item		Data
SAJ	00	PIC	3F
	02	COL	00
JGL	01	RGB	04

Adjusting Parameter :

LEFT screen : YCT 04 SCT
RIGHT screen : SYC 04 SCT



VR1 – VR2 = 1.85 ± 0.07 Vp-p

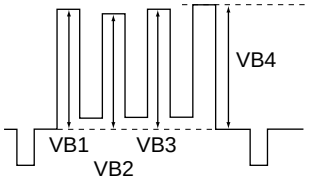
(ii) SUB HUE/SUB COL

Condition :

Category	Item		Data
SAJ	02	COL	1F
JGL	01	RGB	07

Adjusting Parameter :

LEFT screen : YCT 03 SCL
RIGHT screen : SYC 03 SCL



VB1 = VB3 = VB4 ± 70 mV
VB2 = VB3 ± 70 mV

6-4. Color Offset (53, 61 inch model only)

6-4-1. 50 Hz (PAL) TV Mode

1) Enter the PAL RF signal.
2) Enter the service mode, and write the following data to the NVM.

Category	Item		Data	
			53 inch	61 inch
SAJ	0E	CLO	0A	0B

6-4-2. 50 Hz (PAL) Video Mode

1) Enter the PAL video signal.
2) Enter the service mode, and write the following data to the NVM.

Category	Item		Data	
			53 inch	61 inch
SAJ	0E	CLO	09	0A

6-4-3. 60 Hz (NTSC) TV Mode

1) Enter the NTSC RF signal.
2) Enter the service mode, and write the following data to the NVM.

Category	Item		Data	
			53 inch	61 inch
SAJ	0E	CLO	0A	0B

6-4-4. 60 Hz (NTSC) Video Mode

1) Enter the NTSC video signal.
2) Enter the service mode, and write the following data to the NVM.

Category	Item		Data	
			53 inch	61 inch
SAJ	0E	CLO	0A	0B

6-5. REGISTRATION ADJUSTMENT

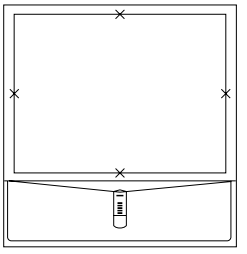
It is adjusted by REGISTRATION ADJUSTMENT respectively in the following 5 modes.

- DRC1250 (50 Hz) mode
- DRC100 (50 Hz) mode
- DRC1250 (60 Hz) mode
- DRC100 (60 Hz) mode
- DRC1250 (60 Hz) WIDE mode

6-5-1. Setup for Adjustment

1. Marking

1) At the 4 insides of the screen, locate the middle. Use a tape measure to identify the middle.



2. Data Setting

1) Set in the DRC1250 (50 Hz) mode.
2) Set in the Service mode, and select the category “PJE”.
3) Press “⑦” + “⓪” button on the commander to read the data from NVM. Then all the default data are restored.
4) Change it to other 4 modes, and set the data with the respectively same process.

Note : When you replaced printed circuit boards or devices or CRTs, and when correction is drastically necessary, press “⑤” +“⓪” (PJE INITIAL) button to initialize the data in the PJE mode.

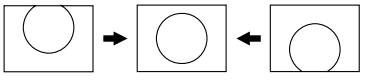
Press “🔇 (MUTE)” + “⓪” buttons on the commander to write the data.

: Be sure to set up the data in the PJE mode. All data initialize it when this operation is done by other categories.

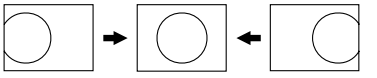
6-5-2. Method of Main Deflection Adjustment

1. Place the caps on the red and blue lenses so that only the green color is displayed.
2. Enter the signal.
3. Set in the Service mode, and select the category “GEO”.
4. Adjust “01 VPS” and “05 HPS” so that the picture is displayed in the center of screen.

01 VPS

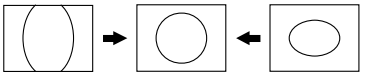


05 HPS

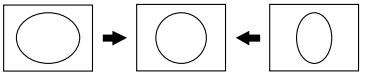


5. Adjust “00 VSZ” and “04 HSZ” so that the picture size is within the specification.

00 VSZ

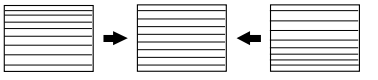


04 HSZ

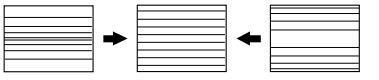


6. Adjust the following items so as to attain the optimum picture.

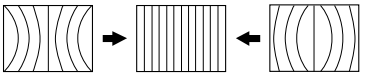
02 VLN



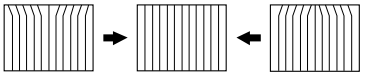
03 SCO



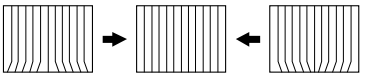
07 PAP



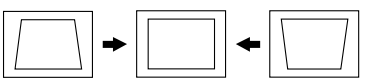
08 UPN



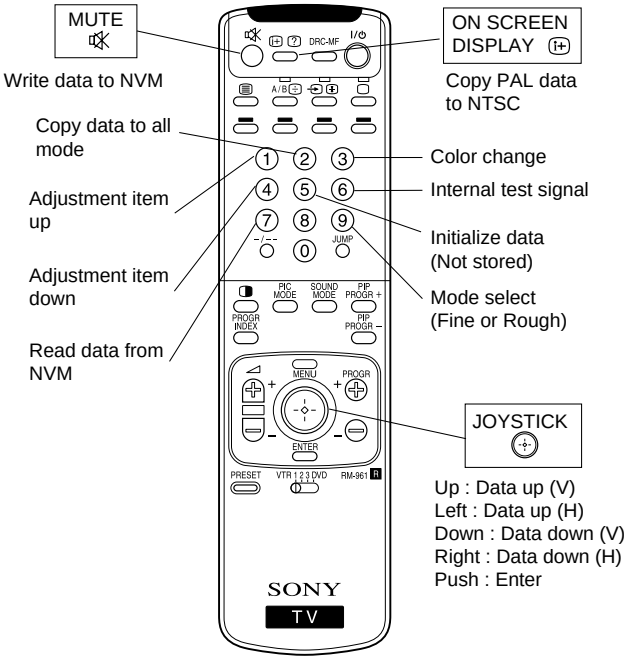
09 LPN



0A TRZ



6-5-3. Operation Method for Projector Engine (PJE) Mode



RM-961

1. Functions of Keys on Commander

- ① : Changes adjustment item. (item No. moves up)
  : Marker moves clockwise from center to outside. (in fine adjustment mode)
- ④ : Changes adjustment item. (item No. moves down)
  : Marker moves counterclockwise from outside to center. (in fine adjustment mode)
- ⊕ : Changes data value. (up, down, or to the left or right)

(move) : Marker moves up, down, or to the left or right. (in fine adjustment mode)

- ③ : Changes adjustment color. (except item No. 00~38) GRN ➔ BLU ➔ RED
- ⑥ : Displays or changes internal test signals.
  : crosshatch + external signal ➔ dot + external signal ➔ crosshatch only ➔ dot only ➔ off
- ⑨ : Switches adjustment mode. rough adjustment mode ➔ fine adjustment mode
- ⊕ : Switches marker moving method. (in fine adjustment mode)

(push) joystick key ➔ ① and ④ buttons

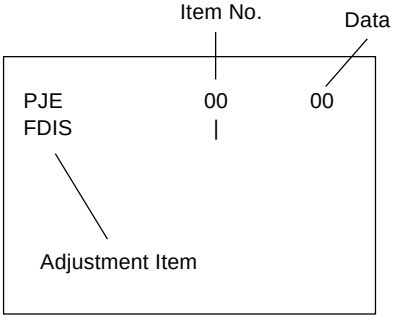
Commander Function (PJE mode)

Button	Mode	Description
🔇 + ⓪	WRITE	Writes data to NVM.
⑦ + ⓪	READ	Reads data from NVM.
⑤ + ⓪	*PJE INITIAL	Service data initialization. Not stored. (Be sure not to use usually)
② + ⓪	*PJE COPY	Copies and writes data of DRC1250 (50Hz) mode to all other modes.
i+ + ⓪	*PJE WRT5060	Copies data of 50 Hz (PAL) mode to 60 Hz (NTSC) mode.

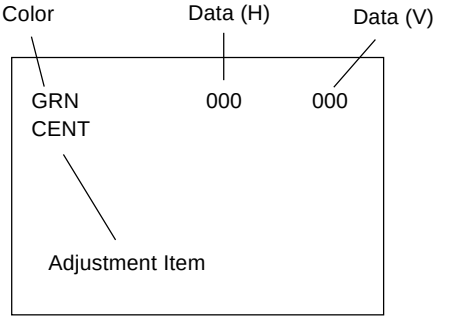
* : only data in the PJE mode.

2. Operation Method for Rough Adjustment

1) Set in the Service mode, and select the category "PJE".
2) Press "①" or "④" button on the commander to select the item, and move "⊕" up, down, or to the left or right to change the data.



3) Select item "GRN CENT". When BLU or RED is displayed, press "③" button on the commander to change the adjustment color in the order of GRN ➔ BLU ➔ RED.
4) In the GRN, BLU, or RED mode, move "⊕" up or down to change the data in vertical direction, or move "⊕" to the left or right to change the data in horizontal direction.

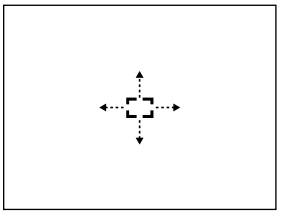


5) When it moves from PJE to other categories, repeat "①" or "④" button and press it.

3. Operation Method for Fine Adjustment (in GRN, BLU, or RED Mode)

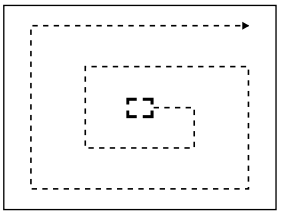
1) Set in the Service mode, and select the category "PJE".
2) Select item "FDIS" so that the data at each position can be displayed in the fine adjustment mode, and set the data to "01".
3) Press "⑨" button on the commander, and the fine adjustment mode will be active where a green marker appears in the center of screen (in the case of GRN mode).
4) Push "⊕ (ENTER)" button, and the marker color will be switched between green (GRN mode) and white alternately.
5) Use "①" or "④" button on the commander, or the joystick to move the marker to the position to be adjusted, where fine adjustment can be made.

• When marker color is white.
(in this case, fine adjustment is disabled)



Operating the joystick can move the marker up, down, or to the left or right freely.

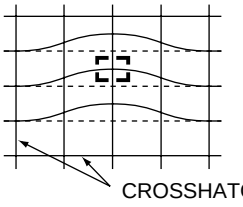
• When marker color is green. (GRN mode)



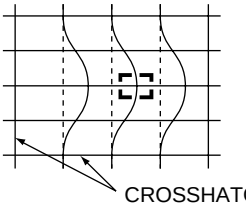
① : moves the marker clockwise from center to outside.
④ : moves the marker counterclockwise from outside to center.

• Fine adjustment can be made on the basis of marker position using joystick key.

Movement when joystick key is moved up.



Movement when joystic key is moved to the right.



6) Press "⑨" button on the commander to return to the rough adjustment mode.

6-5-4. Method of Projector Engine Adjustment (Sub Deflection Adjustment)

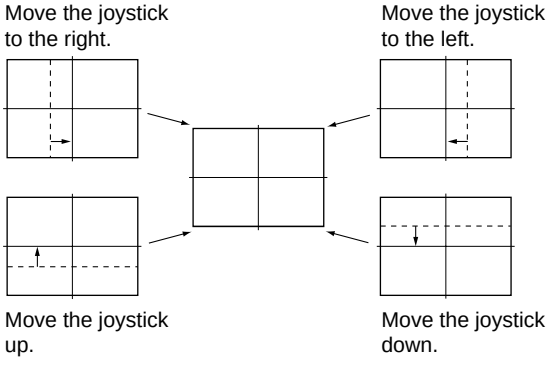
Adjustment ○ : Yes – : No

Adjustment Item	Adjustment Type		
	GRN	RED	BLU
	H / V	H / V	H / V
CENT	○ / ○	○ / ○	○ / ○
SKEW	○ / ○	○ / ○	○ / ○
SIZE	○ / ○	○ / ○	○ / ○
LIN	– / –	○ / –	○ / –
KEY	– / –	– / ○	– / ○
PIN	– / ○	– / ○	– / ○

1. Green Adjustment

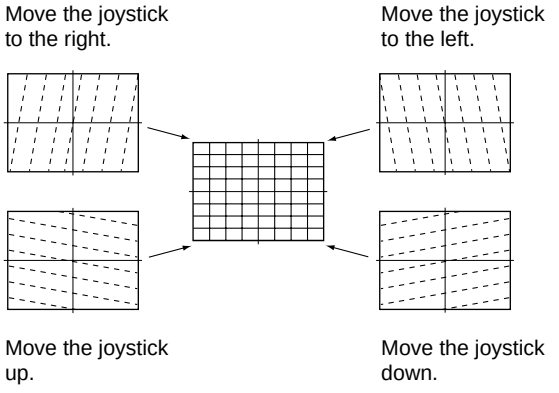
1) Place the caps on the red and blue lenses so that only the green color is displayed.
2) Enter the signal.
3) Set in the Service mode, and select the category "PJE".
4) Press "⑥" button on the commander to display internal test signal (crosshatch).
5) Select "GRN CENT", and adjust so that the picture coincide in the center of screen.

• GRN CENT (horizontally/vertically)



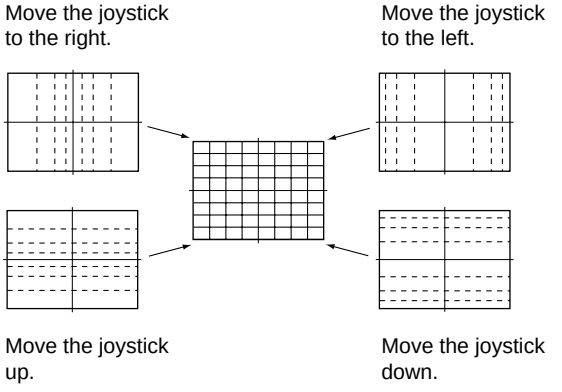
6) Select “GRN SKEW”, and correct the tilt of horizontal lines and vertical lines.

• GRN SKEW (horizontally/vertically)



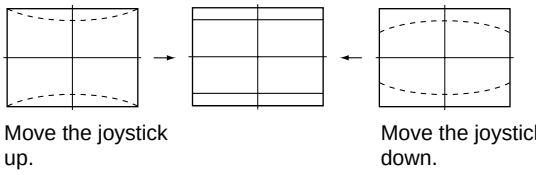
7) Select “GRN SIZE”, and adjust so that each distance from center to left end and to right end is equal. Adjust so that each distance from center to top and to bottom is equal.

• GRN SIZE (horizontally/vertically)



8) Select “GRN PIN”, and adjust so that upper and lower horizontal lines on the screen become straight.

• GRN PIN (vertically)

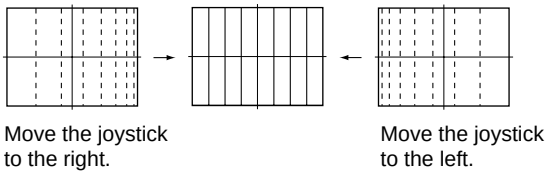


9) Press “⑨” button on the commander to enter the fine adjustment mode.
10) Make fine adjustment so that horizontal lines and vertical lines become straight.
11) Press “⑨” button on the commander to return to the rough adjustment mode.

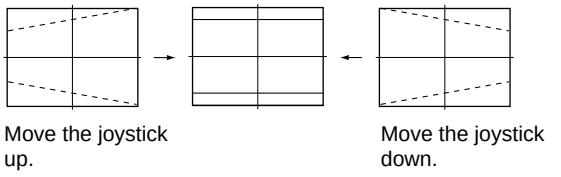
2. Blue Adjustment

1) Place a cap on the red lens so that green and blue colors are displayed.
2) Press “③” button on the commander to select BLU mode.
3) Adjust the following items so that blue lines overlap with green lines.

• BLU CENT (horizontally/vertically)
• BLU SKEW (horizontally/vertically)
• BLU SIZE (horizontally/vertically)
• BLU LIN (horizontally)
Adjust so that each space at the right end and at the left end of screen is equal.



• BLU KEY (vertically)
Adjust so that upper and lower horizontal lines on the screen become parallel.



• BLU PIN (vertically)

4) Press “⑨” button on the commander to enter the fine adjustment mode.
5) Make fine adjustment so that horizontal lines and vertical lines overlap with green lines.
6) Press “⑨” button on the commander to return to the rough adjustment mode.

3. Red Adjustment

1) Place a cap on the blue lens so that green and red colors are displayed.
2) Press “③” button on the commander to select RED mode.
3) Hereinafter, use same manner as that of blue adjustment to adjust so that the red lines overlap with green lines.

6-5-5. Deflection Adjustment

1. DRC1250 50 Hz (PAL) Mode

1) Enter the PAL SPCB signal, and set the DRC1250.
2) Set in the service mode, and write the following data to NVM.

Condition :

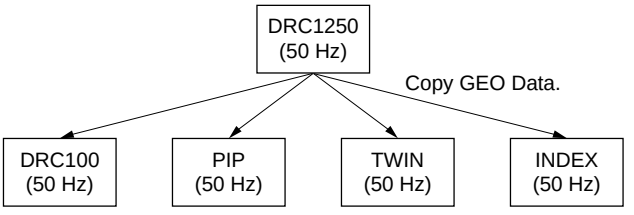
Category	Item		Data
GEO	0B	AGL	07
	0C	BOW	07
	15	VSC	1F
MID	00	HPH	3E
	01	VPH	15

3) Adjust the main deflection. (Refer to 6-5-2.)

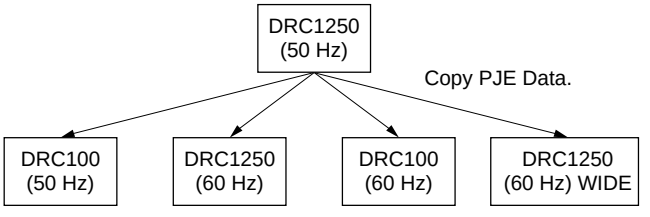
SPEC Overscan Spec. = 7.5%

Input Signal	H SIZE	V SIZE
PAL SPCB	16.6 ± 0.1 sq.	12.5 ± 0.1 sq.

4) After the Main Deflection Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.
5) Select the category "GEO" and the item "19 CPY", and set the data to "01".
   Press "🔇 (MUTE)"+"⓪" buttons to copy GEO data to other 50 Hz modes



6) Adjust the sub deflection (Projector Engine Adjustment). (Refer to 6-5-3.)
7) After the Projector Engine Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.
8) Press "②"+"⓪" buttons to copy PJE data to all other modes in the PJE mode.



2. DRC100 50 Hz (PAL) Mode

1) Enter the PAL SPCB signal, and set the DRC100.
2) Set in the service mode, and write the following data to NVM.

Condition :

Category	Item		Data
GEO	0B	AGL	07
	0C	BOW	07
	15	VSC	1F
MID	00	HPH	3E
	01	VPH	0C

3) Adjust the main deflection. (Refer to 6-5-2.)

SPEC Overscan Spec. = 7.5%

Input Signal	H SIZE	V SIZE
PAL SPCB	16.6 ± 0.1 sq.	12.5 ± 0.1 sq.

4) After the Main Deflection Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.
5) Adjust the sub deflection (Projector Engine Adjustment). (Refer to 6-5-3.)
6) After the Projector Engine Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

3. PIP 50 Hz (PAL) Mode

1) Enter the PAL SPCB signal, and set in the service mode.
2) Open the remote control cover, press "◔ (PIP)" button on the commander to set the PIP mode.
3) Confirm and set the following data.

Condition :

Category	Item		Data
GEO	00	VSZ	Same as DRC1250 50 Hz (PAL) mode
	01	VPS	
	02	VLN	
	03	SCO	
	04	HSZ	
	05	HPS	
	07	PAP	
	08	UPN	
	09	LPN	
	0A	TRZ	
	0B	AGL	07
	0C	BOW	07
	15	VSC	1F
MID	00	HPH	3E
	01	VPH	15

4) Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

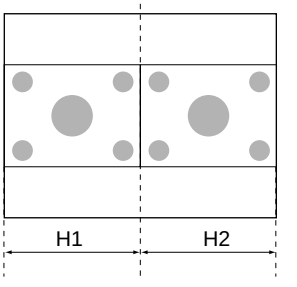
4. TWIN 50 Hz (PAL) Mode

1) Enter the PAL SPCB signal, and set in the service mode.
2) Press "◑ (TWIN)" button on the commander to set the TWIN mode.
3) Confirm and set the following data.

Condition :

Category	Item		Data
GEO	00	VSZ	Same as DRC1250 50 Hz (PAL) mode
	01	VPS	
	02	VLN	
	03	SCO	
	04	HSZ	
	05	HPS	
	07	PAP	
	08	UPN	
	09	LPN	
	0A	TRZ	
	0B	AGL	07
	0C	BOW	07
	15	VSC	1F
MID	00	HPH	7B
	01	VPH	20
	11	TMP	01
	12	TSP	00

4) Select the category "GEO" and the item "05 HPS", and adjust the horizontal position.



H1 – H2 = ± 0.1 sq.

5) Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

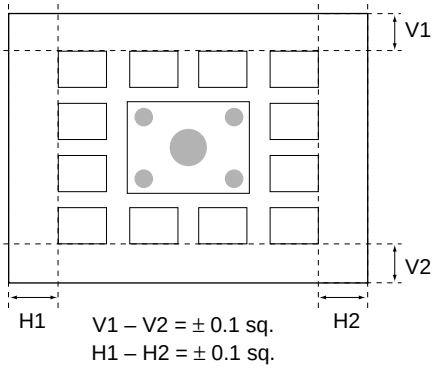
5. INDEX 50 Hz (PAL) Mode

1) Enter the PAL SPCB signal, and set in the service mode.
2) Press "PROGR INDEX" button on the commander to set the INDEX mode.
3) Confirm and set the following data.

Condition :

Category	Item		Data
GEO	00	VSZ	Same as DRC1250 50 Hz (PAL) mode
	01	VPS	
	02	VLN	
	03	SCO	
	04	HSZ	
	05	HPS	
	07	PAP	
	08	UPN	
	09	LPN	
	0A	TRZ	
	0B	AGL	07
	0C	BOW	07
	15	VSC	1F
MID	00	HPH	78
	01	VPH	1A

4) Select the category "GEO" and the item "05 HPS" to adjust the horizontal position, and select the item "01 VPS" to adjust the vertical position.



5) Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

6. DRC1250 60 Hz (NTSC) Mode

1) Enter the NTSC monoscope signal, and set the DRC1250.
2) Set in the service mode, and write the following data to NVM.

Condition :

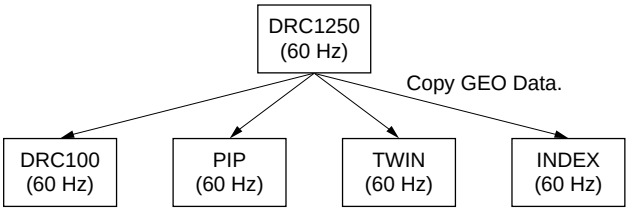
Category	Item		Data
GEO	0B	AGL	07
	0C	BOW	07
	15	VSC	22
MID	00	HPH	49
	01	VPH	25

3) Adjust the main deflection. (Refer to 6-5-2.)

SPEC Overscan Spec. = 7.5%

Input Signal	H SIZE	V SIZE
NTSC monoscope	15.7 ± 0.1 sq.	11.8 ± 0.1 sq.

4) After the Main Deflection Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.
5) Select the category "GEO" and the item "19 CPY", and set the data to "01".
   Press "🔇 (MUTE)"+"⓪" buttons to copy GEO data to other 60 Hz modes



6) Adjust the sub deflection (Projector Engine Adjustment). (Refer to 6-5-3.)
7) After the Projector Engine Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

7. DRC100 60 Hz (NTSC) Mode

1) Enter the NTSC monoscope signal, and set the DRC100.
2) Set in the service mode, and write the following data to NVM.

Condition :

Category	Item		Data
GEO	0B	AGL	07
	0C	BOW	07
	15	VSC	22
MID	00	HPH	49
	01	VPH	13

3) Adjust the main deflection. (Refer to 6-5-2.)

SPEC Overscan Spec. = 7.5%

Input Signal	H SIZE	V SIZE
NTSC monoscope	15.7 ± 0.1 sq.	11.8 ± 0.1 sq.

4) After the Main Deflection Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.
5) Adjust the sub deflection (Projector Engine Adjustment). (Refer to 6-5-3.)
6) After the Projector Engine Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

8. PIP 60 Hz (NTSC) Mode

1) Enter the NTSC monoscope signal, and set in the service mode.
2) Open the remote control cover, press "◔ (PIP)" button on the commander to set the PIP mode.
3) Confirm and set the following data.

Condition :

Category	Item		Data
GEO	00	VSZ	Same as DRC1250 60 Hz (NTSC) mode
	01	VPS	
	02	VLN	
	03	SCO	
	04	HSZ	
	05	HPS	
	07	PAP	
	08	UPN	
	09	LPN	
	0A	TRZ	
	0B	AGL	07
	0C	BOW	07
	15	VSC	22
MID	00	HPH	49
	01	VPH	25

4) Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

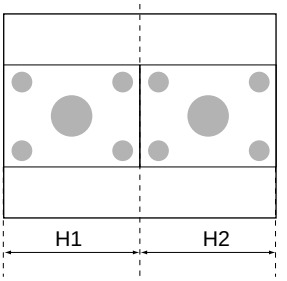
9. TWIN 60 Hz (NTSC) Mode

1) Enter the NTSC monoscope signal, and set in the service mode.
2) Press "◑ (TWIN)" button on the commander to set the TWIN mode.
3) Confirm and set the following data.

Condition :

Category	Item		Data
GEO	00	VSZ	Same as DRC1250 60 Hz (NTSC) mode
	01	VPS	
	02	VLN	
	03	SCO	
	04	HSZ	
	05	HPS	
	07	PAP	
	08	UPN	
	09	LPN	
	0A	TRZ	
	0B	AGL	07
	0C	BOW	07
	15	VSC	22
MID	00	HPH	6F
	01	VPH	2E
	11	TMP	01
	12	TSP	00

4) Select the category "GEO" and the item "05 HPS", and adjust the horizontal position.



H1 – H2 = ± 0.1 sq.

5) Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

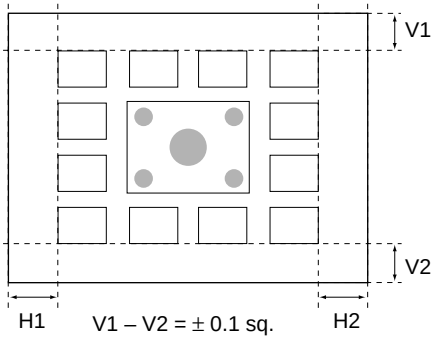
10.INDEX 60 Hz (NTSC) Mode

1) Enter the NTSC monoscope signal, and set in the service mode.
2) Press "PROGR INDEX" button on the commander to set the INDEX mode.
3) Confirm and set the following data.

Condition :

Category	Item		Data
GEO	00	VSZ	Same as DRC1250 60 Hz (NTSC) mode
	01	VPS	
	02	VLN	
	03	SCO	
	04	HSZ	
	05	HPS	
	07	PAP	
	08	UPN	
	09	LPN	
	0A	TRZ	
	0B	AGL	07
	0C	BOW	07
	15	VSC	22
MID	00	HPH	6C
	01	VPH	2D

4) Select the category "GEO" and the item "05 HPS" to adjust the horizontal position, and select the item "01 VPS" to adjust the vertical position.



V1 – V2 = ± 0.1 sq.
H1 – H2 = ± 0.1 sq.

5) Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

11.DRC1250 WIDE 60 Hz (NTSC) Mode

1) Enter the NTSC monoscope signal and set the DRC1250.
2) Press "MENU" button on the commander and move "⊕" up or down to enter the "FEATURE" ➧ "WIDE MODE".
3) Select "WIDE MODE : ON", and push "⊕ (ENTER)" button.
4) Press "MENU" button to return to service mode screen.
5) Set in the service mode and write the following data to NVM.

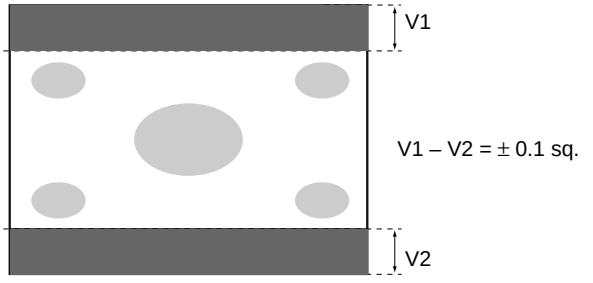
Condition :

Category	Item		Data
GEO	0B	AGL	07
	0C	BOW	07
	14	VAS	2C
	15	VSC	22
	16	USC	01
	17	VBW	03

3) Adjust the main deflection. (Refer to 6-5-2.)

SPEC

Input Signal	H SIZE
NTSC monoscope	15.7 ± 0.1 sq.



4) After the Main Deflection Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.
5) Adjust the sub deflection (Projector Engine Adjustment). (Refer to 6-5-3.)
6) After the Projector Engine Adjustment finished, press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

12.PIP WIDE 60 Hz (NTSC) Mode

1) Enter the NTSC monoscope signal and set in the service mode.
2) Set the WIDE mode and open the remote control cover, press "◓ (PIP)" button on the commander to set the PIP mode.
3) Confirm and write the following data.

Condition :

Category	Item		Data
GEO	00	VSZ	Same as DRC1250 WIDE 60 Hz (NTSC) mode
	01	VPS	
	02	VLN	
	03	SCO	
	04	HSZ	
	05	HPS	
	07	PAP	
	08	UPN	
	09	LPN	
	0A	TRZ	
	0B	AGL	07
	0C	BOW	07
	14	VAS	2C
	15	VSC	22
	17	VBW	03

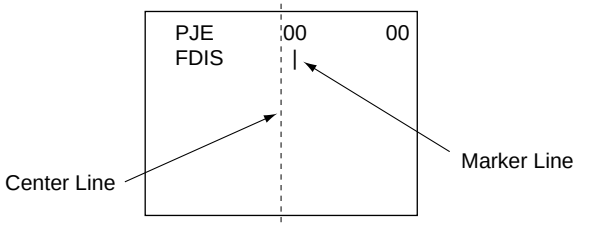
4) Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.

Note : Incase of replacing CRTs, adjust the set-up adjustments (items 4-1 to 4-7) and the registration adjustment (item 6-5).
In case of replacing two or three CRTs at the same time, replace and adjust one by one.

6-6. AUTO CONVERGENCE SETTING

This adjustment must be performed after the registration adjustment was made or after readjustment was made by any reason.

1. Darken the periphery of this set.
2. Enter the PAL SPCB signal, and set the DRC100 mode.
3. Set in the service mode, and select the category "PJE" and the item "PWM2".
4. Adjust "PWM2" so that the marker line is on monoscope center line.



5. Press "🔇 (MUTE)"+"⓪" buttons on the commander to write the data to the NVM.
6. Press "⊞ (AUTO CONVERGENCE)" button on the front panel of the set.
   (The offset value is now automatically stored.)
7. Check that no error message appears.
   If an error message appears, recheck. (Refer to 6-8.)
8. In the same manner, select DRC100 mode respectively, and press the "⊞ (AUTO CONVERGENCE)" button.
9. Enter the NTSC monoscope signal, and perform the same steps in the DRC1250, DRC100 and DRC1250 WIDE modes respectively.

6-7. WHITE BALANCE ADJUSTMENT

1. Enter the monoscope signal.
2. Set in the service mode.
3. Press "MENU" button on the commander to select "A/V CONTROL" ➧ "PICTURE MODE" ➧ "ADJUST".

Adjustment Condition

PICTURE MODE : PERSONAL
PICTURE : 0%
BRIGHT : 50%

If the noise of DCF (Digital Comb Filter) has an effecting white balance adjustment, change service data as follows while the adjustment.

OPM 06 COM : 00 → 01

(This time, beginning inspection also should be done under some condition.)

Adjusting Parameter

Category	Item	
WHB	02	SBR
	03	RDR
	05	BDR
	06	RCT
	08	BCT

4. Adjust "02 SBR" so that 10 IRE section barely grows.
3. Enter the all-white pattern signal.
6. Adjust "06 RCT" and "08 BCT" so as to attain the optimum white balance.
7. Adjust "02 SBR" so that 100 IRE section barely grows.
8. Adjust "03 RDR" and "05 BDR" so as to attain the optimum white balance.
9. Repeatedly adjust the white balance for the minimum and maximum picture setting.
10. Enter the monoscope signal, and select "SAJ 00 PIC", and set the data to "00".
11. Adjust "02 SBR" so that the border between 0 IRE and 10 IRE becomes distinct.

6-8. AUTO CONVERGENCE ERROR CODE LIST

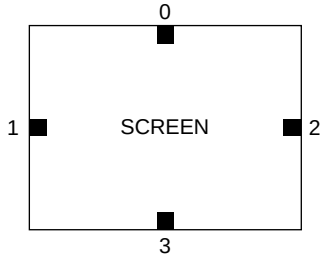
If an error code is displayed after the set has been fully adjusted, correctly, plese check the following items : position, tilt and sizing. If either of these adjustments are off, even slightli, the auto registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns is being flashed on the screen for the sensor to read. Therefore, auto registration (called auto convergence) cannot operate properly causing an error code to be displayed. In order for this function to operate properly, correct position, tilt and size must be adjusted properly.

ERROR CODE LIST

ERROR CODE	DESCRIPTION	NOTE
00	No Error	
10	Sensor Input Level Low	* Check wiring, beam position, sensor. 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
20	Sensor Input Level High	* Check OP-Amp circuit. 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
30	Loop Limit Over	* Check the registration information on the convergence board.
40	Regi Data Overflow	* Check the convergence yoke driver ICs.
50	Regi Data Overdraw	
60	Offset Data Overflow	* Convergence patterns displayed are out of normal range.
70	Offset Data Overdraw	

* : In case of multiple error, last error is displayed.

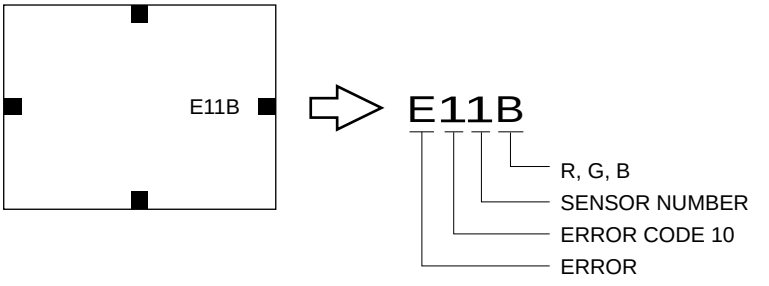
[SENSOR POSITION]



0 : UPPER SENSOR
1 : LEFT SENSOR
2 : RIGHT SENSOR
3 : LOWER SENSOR

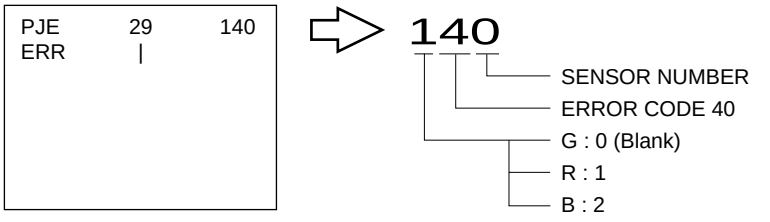
• ERROR CODE SCREEN DISPLAY

(When press "⊡ (AUTO CONVERGENCE)" button.)



• ERROR CODE SCREEN DISPLAY

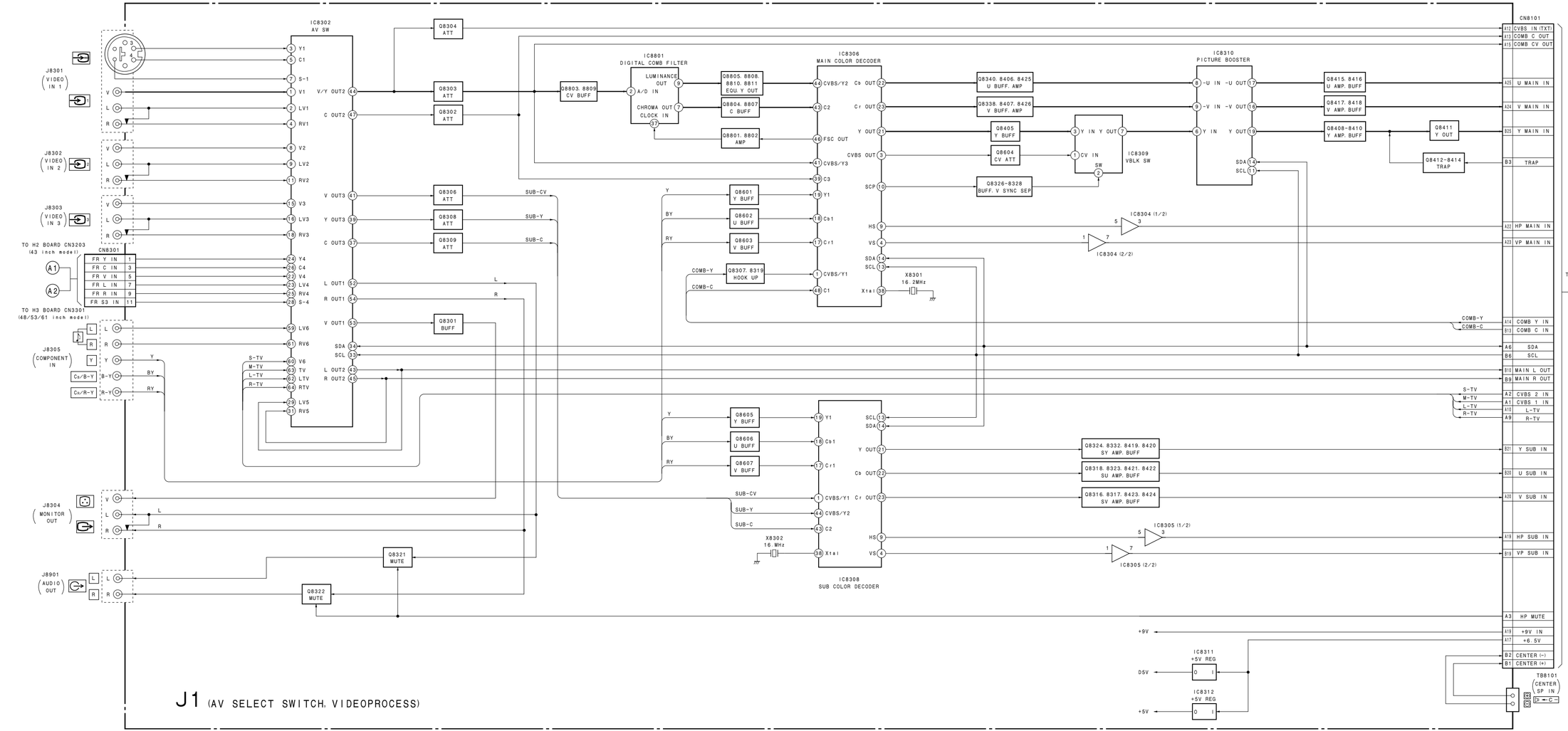
(When select "PJE ➡ "29 ERR".)

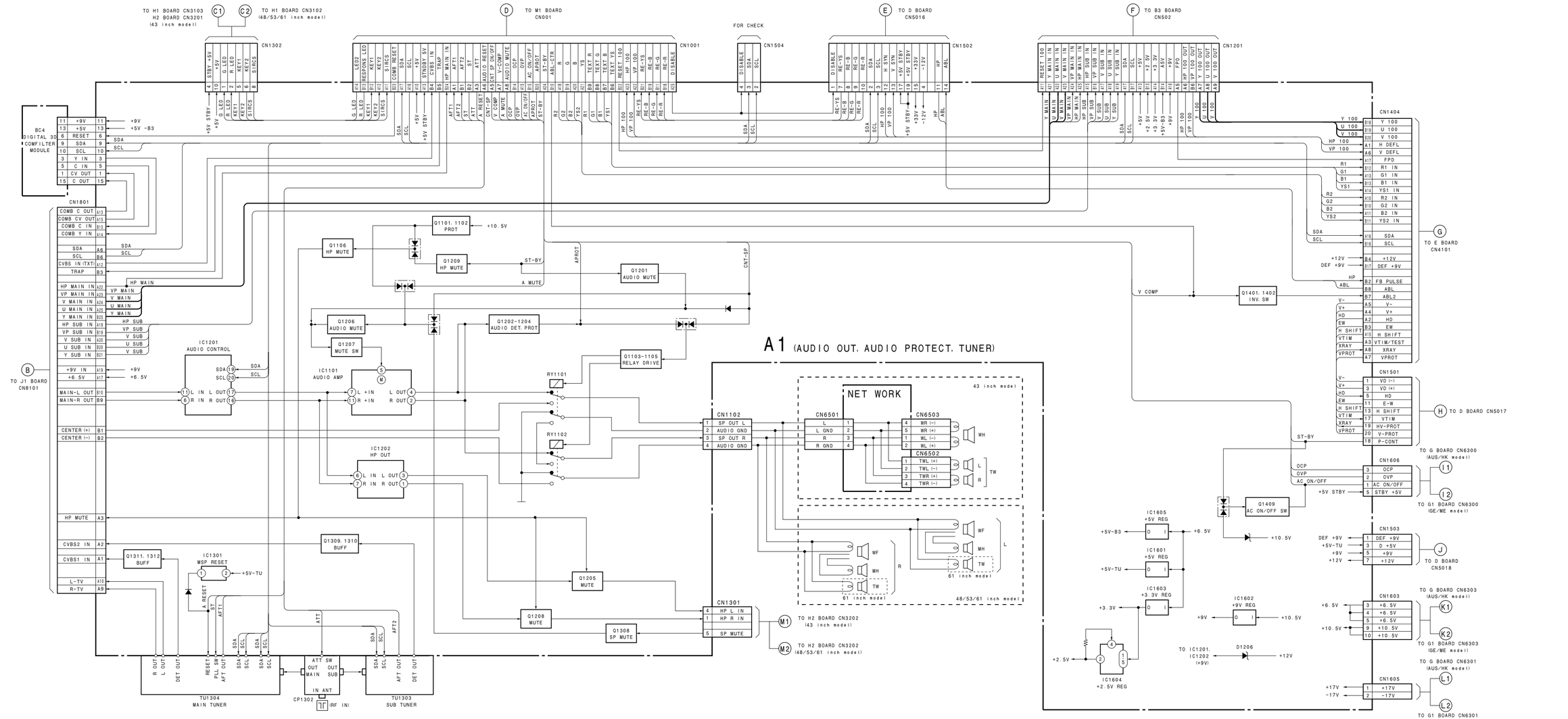


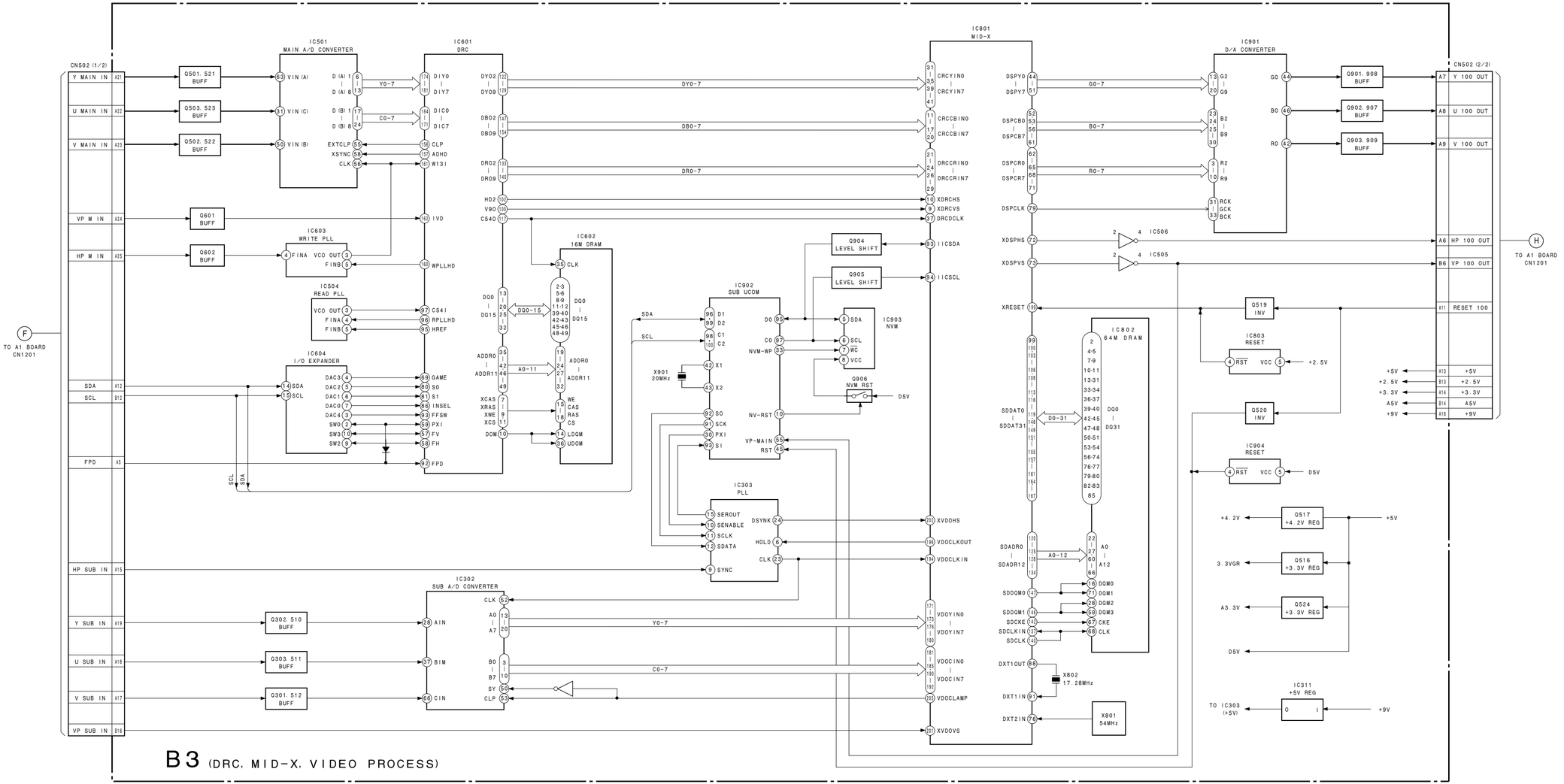
Category : PJE
Item : 29 ERR

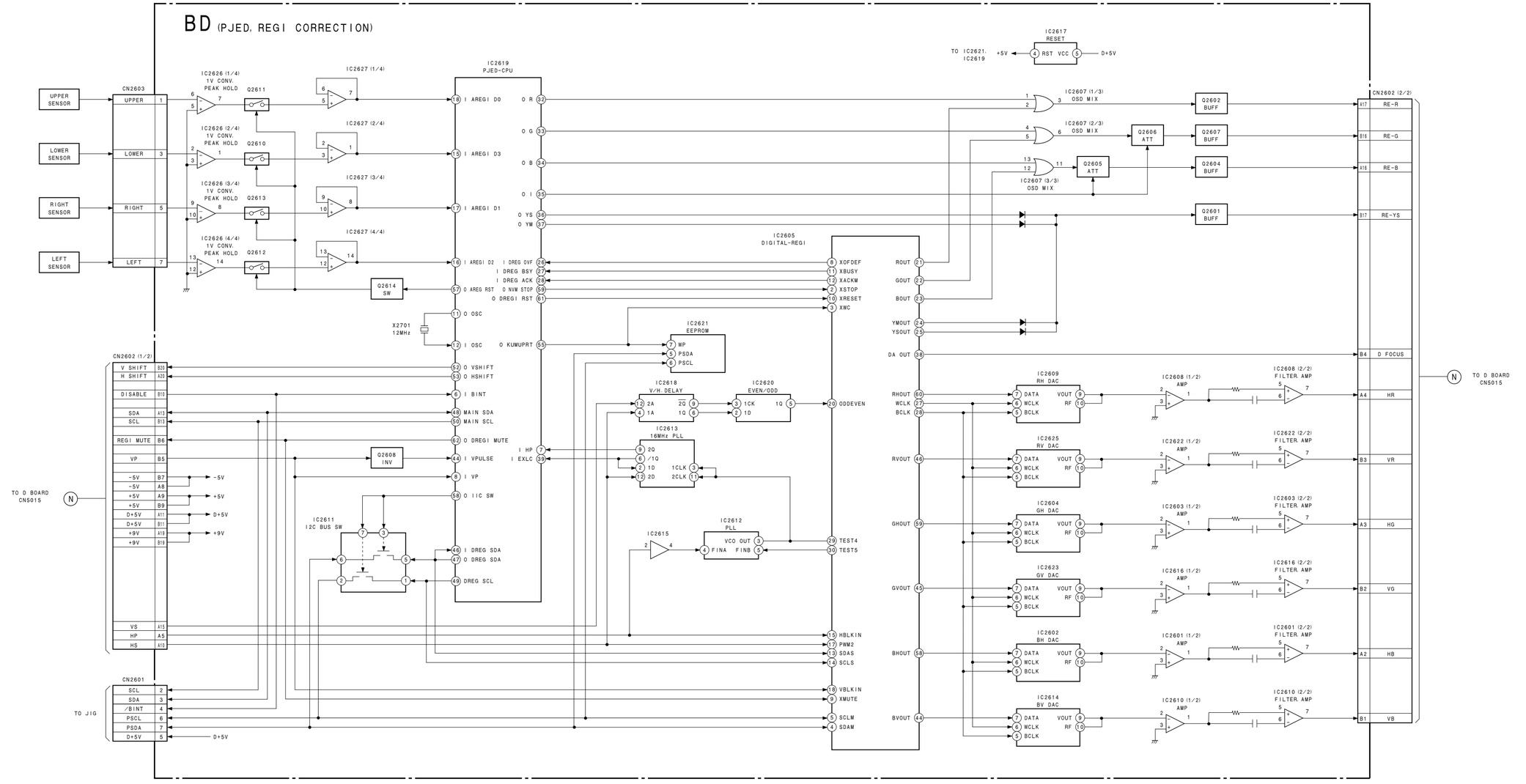
SECTION 7
DIAGRAMS

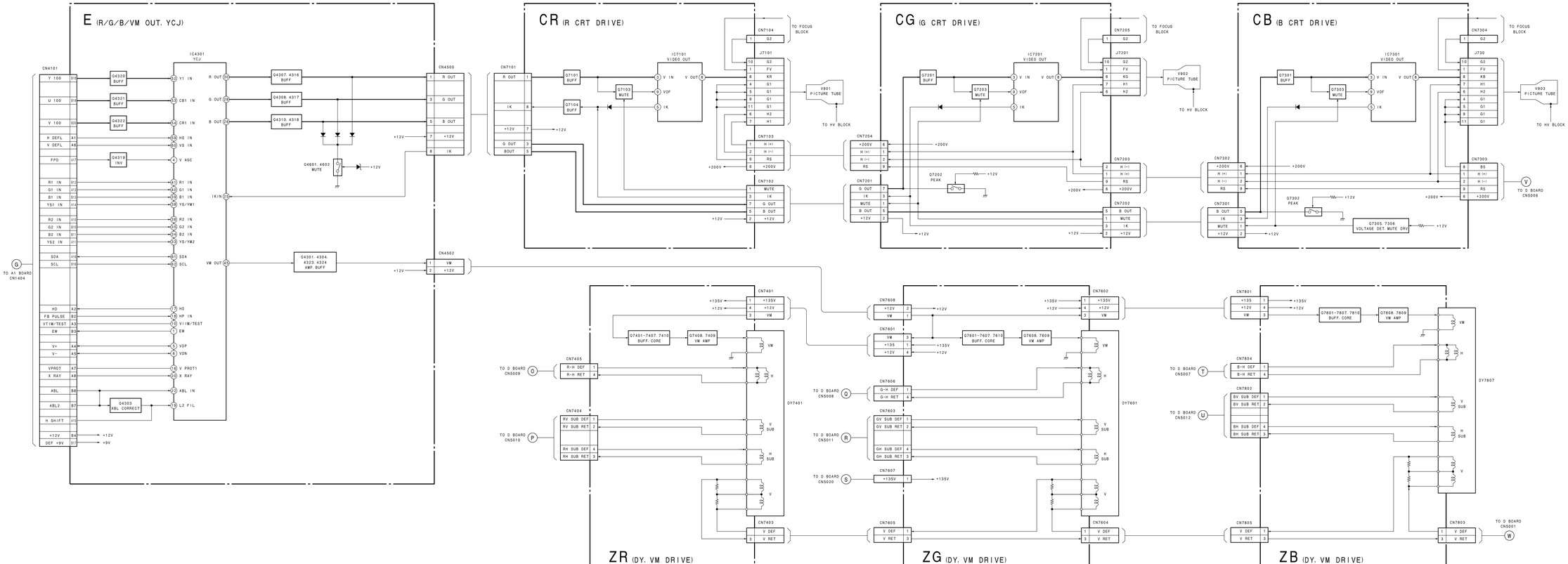
7-1. BLOCK DIAGRAMS

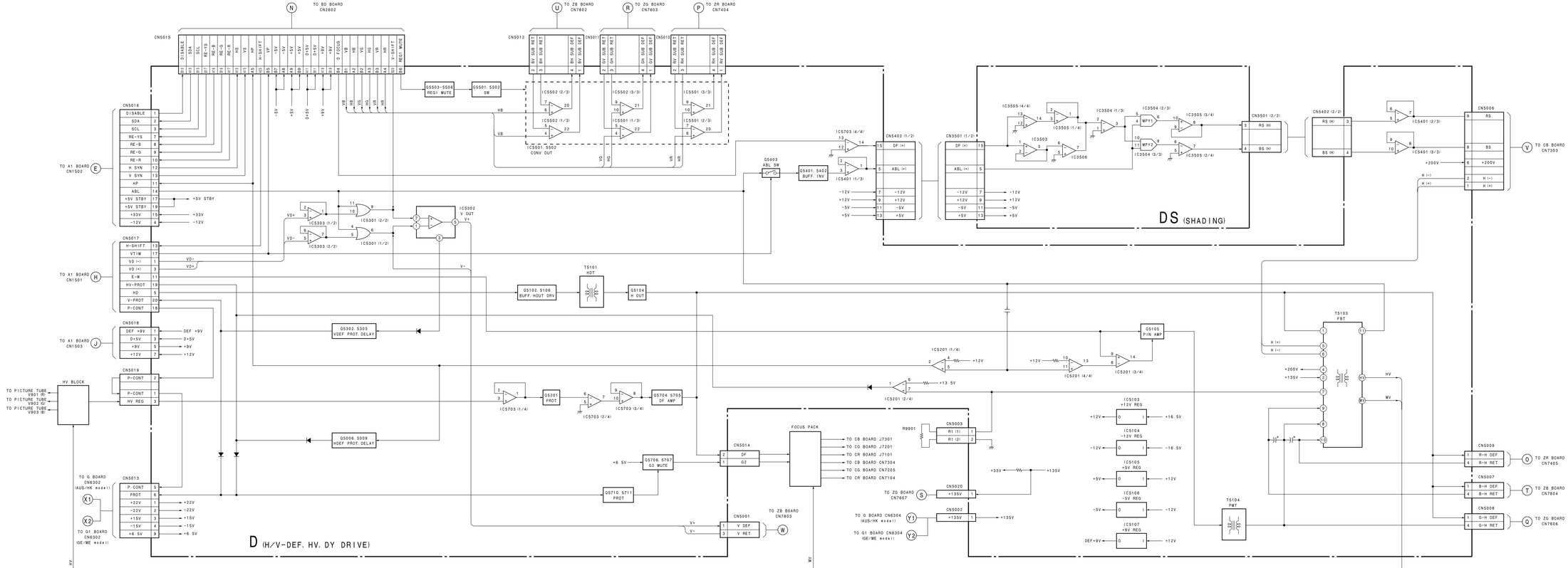


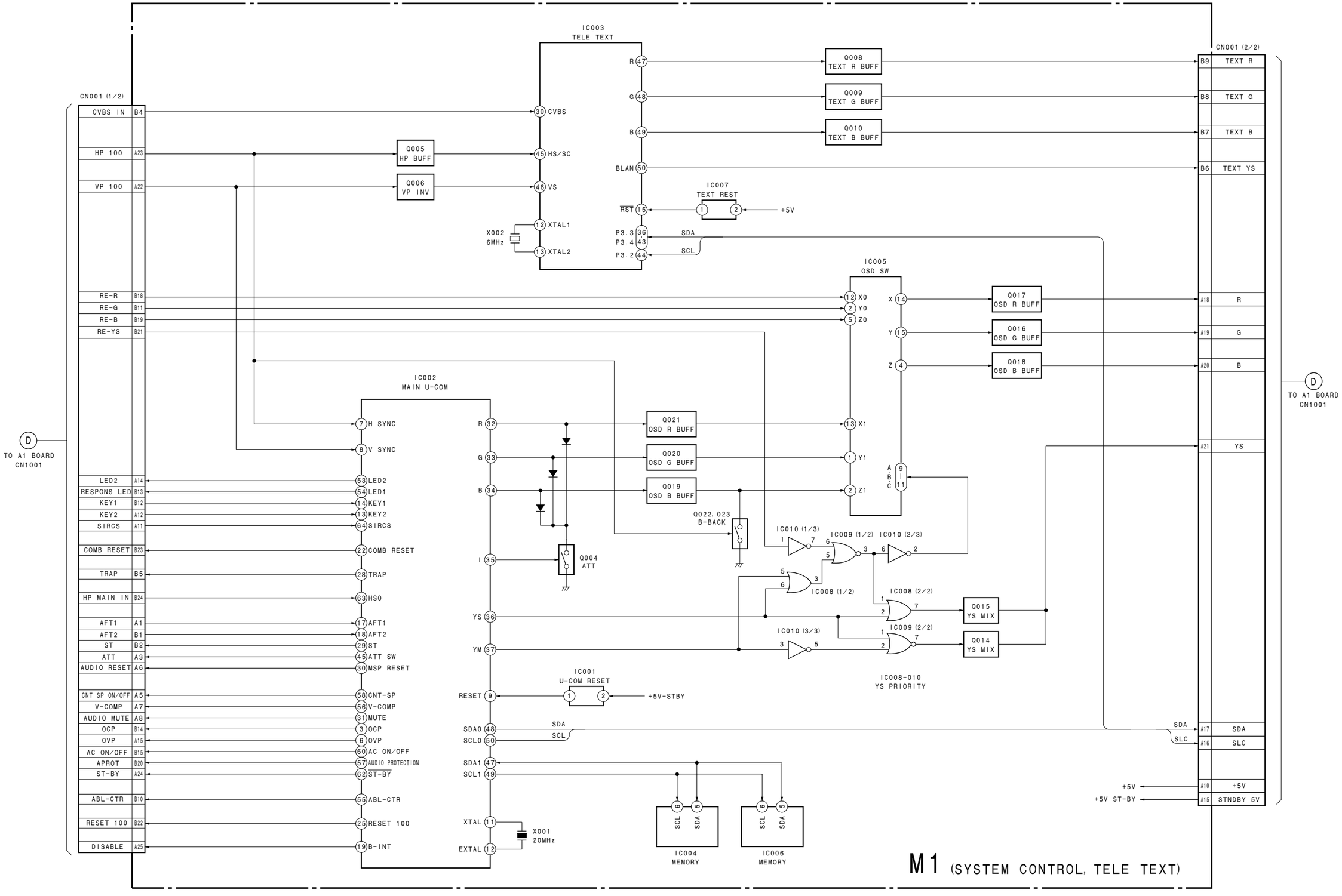

A1 (AUDIO OUT, AUDIO PROTECT, TUNER)
NET WORK
43 inch model
48/53/61 inch model
61 inch model
TO H1 BOARD CN3103
H2 BOARD CN3201
(43 inch model)
TO H1 BOARD CN3102
(48/53/61 inch model)
TO M1 BOARD
CN001
FOR CHECK
TO D BOARD
CN5016
TO B3 BOARD
CN502
CN1302
CN1001
CN1504
CN1502
CN1201
CN1404
CN1501
CN1606
CN1503
CN1603
CN1605
BC4
DIGITAL 3D
COMFILTER
MODULE
CN1801
CN1102
CN1301
CN6501
CN6503
CN6502
IC1201
AUDIO CONTROL
IC1101
AUDIO AMP
IC1202
HP OUT
IC1301
MSP RESET
Q1101, 1102
PROT
Q1106
HP MUTE
Q1209
HP MUTE
Q1201
AUDIO MUTE
Q1206
AUDIO MUTE
Q1207
MUTE SW
Q1202-1204
AUDIO DET. PROT
Q1103-1105
RELAY DRIVE
Q1309, 1310
BUFF
Q1311, 1312
BUFF
Q1205
MUTE
Q1208
MUTE
Q1308
SP MUTE
Q1401, 1402
INV. SW
Q1409
AC ON/OFF SW
RY1101
RY1102
IC1605
+5V REG
IC1601
+5V REG
IC1603
+3.3V REG
IC1602
+9V REG
IC1604
+2.5V REG
D1206
TU1304
MAIN TUNER
TU1303
SUB TUNER
CP1302
IN ANT
IRF IN
TO J1 BOARD
CN8101
TO E BOARD
CN4101
TO D BOARD CN5017
TO G BOARD CN6300
(AUS/HK model)
TO G1 BOARD CN6300
(GE/ME model)
TO D BOARD
CN5018
TO G BOARD CN6303
(AUS/HK model)
TO G1 BOARD CN6303
(GE/ME model)
TO G BOARD CN6301
(AUS/HK model)
TO G1 BOARD CN6301
(GE/ME model)
TO H2 BOARD CN3202
(43 inch model)
TO H2 BOARD CN3202
(48/53/61 inch model)
TO IC1201,
IC1202
(+9V)
+9V
+6.5V
+5V-B3
+5V-TU
+3.3V
+2.5V
+10.5V
+12V
DEF +9V
+17V
-17V
SDA
SCL
HP MAIN
V MAIN
U MAIN
Y MAIN
HP SUB
V SUB
U SUB
Y SUB
ST-BY
A MUTE
APROT
CNT-SP
V COMP
HP
ABL
OCP
OVP
AC ON/OFF
STBY +5V
– 78 –
– 79 –
– 80 –


CN502 (1/2)
Y MAIN IN
U MAIN IN
V MAIN IN
VP M IN
HP M IN
SDA
SCL
FPD
HP SUB IN
Y SUB IN
U SUB IN
V SUB IN
VP SUB IN
TO A1 BOARD CN1201
IC501 MAIN A/D CONVERTER
IC601 DRC
IC801 MID-X
IC901 D/A CONVERTER
CN502 (2/2)
TO A1 BOARD CN1201
Q501, 521 BUFF
Q503, 523 BUFF
Q502, 522 BUFF
Q601 BUFF
Q602 BUFF
IC603 WRITE PLL
IC504 READ PLL
IC604 I/O EXPANDER
IC602 16M DRAM
IC902 SUB UCOM
IC903 NVM
Q904 LEVEL SHIFT
Q905 LEVEL SHIFT
Q906 NVM RST
X901 20MHz
IC303 PLL
IC302 SUB A/D CONVERTER
Q302, 510 BUFF
Q303, 511 BUFF
Q301, 512 BUFF
IC802 64M DRAM
X802 17.28MHz
X801 54MHz
Q901, 908 BUFF
Q902, 907 BUFF
Q903, 909 BUFF
IC506
IC505
Q519 INV
IC803 RESET
Q520 INV
IC904 RESET
Q517 +4.2V REG
Q516 +3.3V REG
Q524 +3.3V REG
IC311 +5V REG
+2.5V
+3.3V
+4.2V
3.3VGR
A3.3V
D5V
+5V
+9V
B3 (DRC, MID-X, VIDEO PROCESS)


BD (PJED, REGI CORRECTION)
UPPER SENSOR
LOWER SENSOR
RIGHT SENSOR
LEFT SENSOR
CN2603
IC2626 (1/4) 1V CONV. PEAK HOLD
IC2626 (2/4) 1V CONV. PEAK HOLD
IC2626 (3/4) 1V CONV. PEAK HOLD
IC2626 (4/4) 1V CONV. PEAK HOLD
Q2611
Q2610
Q2613
Q2612
IC2627 (1/4)
IC2627 (2/4)
IC2627 (3/4)
IC2627 (4/4)
IC2619 PJED-CPU
I AREGI D0
I AREGI D3
I AREGI D1
I AREGI D2
O AREG RST
O OSC
I OSC
X2701 12MHz
O KUMUPRT
I DREG OVF
I DREG BSY
I DREG ACK
O NVM STOP
O DREGI RST
O R
O G
O B
O I
O YS
O YM
Q2614 SW
IC2605 DIGITAL-REGI
XOFDEF
XBUSY
XACKM
XSTOP
XRESET
XWC
ROUT
GOUT
BOUT
YMOUT
YSOUT
DA OUT
IC2621 EEPROM
WP
PSDA
PSCL
IC2618 V/H DELAY
IC2620 EVEN/ODD
ODDEVEN
IC2613 16MHz PLL
IC2615
IC2612 PLL
VCO OUT
FINA
FINB
TEST4
TEST5
IC2617 RESET
RST VCC
TO IC2621, IC2619
+5V
D+5V
IC2607 (1/3) OSD MIX
IC2607 (2/3) OSD MIX
IC2607 (3/3) OSD MIX
Q2606 ATT
Q2605 ATT
Q2602 BUFF
Q2607 BUFF
Q2604 BUFF
Q2601 BUFF
CN2602 (2/2)
RE-R
RE-G
RE-B
RE-YS
D FOCUS
HR
VR
HG
VG
HB
VB
TO D BOARD CN5015
CN2602 (1/2)
V SHIFT
H SHIFT
DISABLE
SDA
SCL
REGI MUTE
VP
-5V
+5V
D+5V
+9V
O VSHIFT
O HSHIFT
I BINT
MAIN SDA
MAIN SCL
O DREGI MUTE
I VPULSE
I VP
O IIC SW
Q2608 INV
I HP
I EXLC
IC2611 I2C BUS SW
I DREG SDA
O DREG SDA
DREG SCL
VS
HP
HS
HBLKIN
PWM2
SDAS
SCLS
VBLKIN
XMUTE
SCLM
SDAM
CN2601
TO JIG
/BINT
PSCL
PSDA
RHOUT
WCLK
BCLK
RVOUT
GHOUT
GVOUT
BHOUT
BVOUT
IC2609 RH DAC
IC2625 RV DAC
IC2604 GH DAC
IC2623 GV DAC
IC2602 BH DAC
IC2614 BV DAC
DATA
VOUT
RF
IC2608 (1/2) AMP
IC2608 (2/2) FILTER AMP
IC2622 (1/2) AMP
IC2622 (2/2) FILTER AMP
IC2603 (1/2) AMP
IC2603 (2/2) FILTER AMP
IC2616 (1/2) AMP
IC2616 (2/2) FILTER AMP
IC2601 (1/2) AMP
IC2601 (2/2) FILTER AMP
IC2610 (1/2) AMP
IC2610 (2/2) FILTER AMP

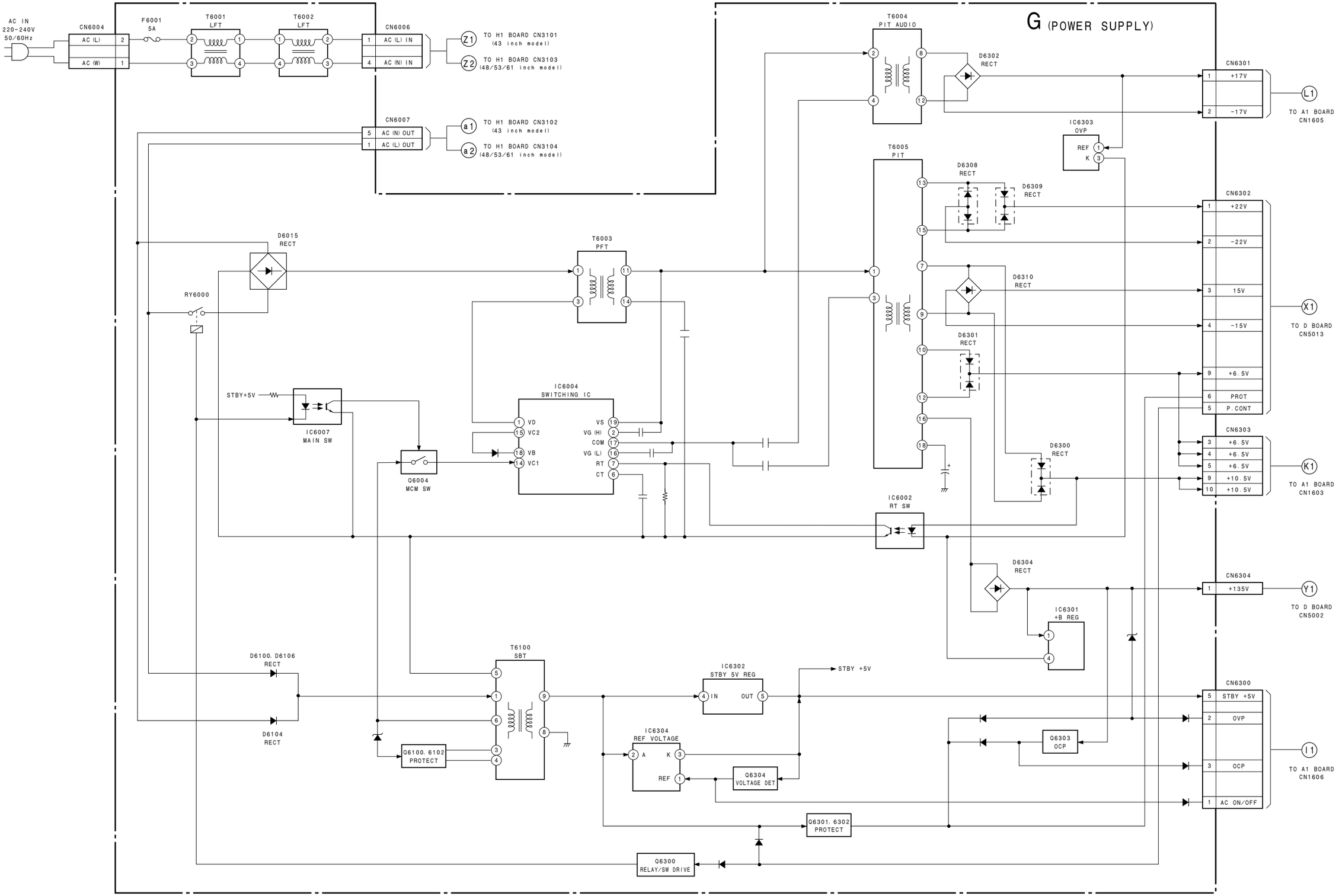

E (R/G/B/VM OUT, YCJ)
CR (R CRT DRIVE)
CG (G CRT DRIVE)
CB (B CRT DRIVE)
ZR (DY, VM DRIVE)
ZG (DY, VM DRIVE)
ZB (DY, VM DRIVE)
CN4101
IC4301 YCJ
CN4500
CN4502
CN7101
CN7104
CN7103
CN7102
CN7204
CN7201
CN7205
CN7203
CN7202
CN7304
CN7302
CN7301
CN7303
IC7101 VIDEO OUT
IC7201 VIDEO OUT
IC7301 VIDEO OUT
J7101
J7201
J730
TO FOCUS BLOCK
Y901 PICTURE TUBE
V902 PICTURE TUBE
V903 PICTURE TUBE
TO HV BLOCK
Q4320 BUFF
Q4321 BUFF
Q4322 BUFF
Q4319 INV
Q4307. 4316 BUFF
Q4308. 4317 BUFF
Q4310. 4318 BUFF
Q4601. 4602 MUTE
Q4301. 4304. 4323. 4324 AMP. BUFF
Q4303 ABL CORRECT
Q7101 BUFF
Q7104 BUFF
Q7103 MUTE
Q7201 BUFF
Q7203 MUTE
Q7202 PEAK
Q7301 BUFF
Q7303 MUTE
Q7302 PEAK
Q7305. 7306 VOLTAGE DET. MUTE DRV
TO A1 BOARD CN1404
TO D BOARD CN5006
Q7401-7407. 7410 BUFF. CORE
Q7408. 7409 VM AMP
Q7601-7607. 7610 BUFF. CORE
Q7608. 7609 VM AMP
Q7801-7807. 7810 BUFF. CORE
Q7808. 7809 VM AMP
DY7401
DY7601
DY7807
TO D BOARD CN5009
TO D BOARD CN5010
TO D BOARD CN5008
TO D BOARD CN5011
TO D BOARD CN5020
TO D BOARD CN5007
TO D BOARD CN5012
TO D BOARD CN5001


TO BD BOARD CN2602
TO ZB BOARD CN7802
TO ZG BOARD CN7603
TO ZR BOARD CN7404
CN5015
CN5012
CN5011
CN5010
CN5016
CN5017
CN5018
CN5019
CN5013
CN5014
CN5001
CN5402 (1/2)
CN3501 (1/2)
CN5402 (2/2)
CN5006
CN5009
CN5007
CN5008
TO A1 BOARD CN1502
TO A1 BOARD CN1501
TO A1 BOARD CN1503
HV BLOCK
TO PICTURE TUBE V901 ⓑ
TO PICTURE TUBE V902 ⓖ
TO PICTURE TUBE V903 ⓡ
TO G BOARD CN6302 (AUS/HK model)
TO G1 BOARD CN6302 (GE/WE model)
TO G BOARD CN6304 (AUS/HK model)
TO G1 BOARD CN6304 (GE/WE model)
TO ZB BOARD CN7803
TO CB BOARD CN7803
TO ZR BOARD CN7405
TO ZB BOARD CN7804
TO ZG BOARD CN7606
TO ZG BOARD CN7607
TO CB BOARD J7301
TO CG BOARD J7201
TO CR BOARD J7101
TO CB BOARD CN7304
TO CG BOARD CN7205
TO CR BOARD CN7104
Q5503-5506 REG1 MUTE
Q5501, 5502 SW
IC5501, 5502 CONV. OUT
Q5403 ABL SW
Q5401, 5402 BUFF. INV
IC5703 (4/4)
IC5401 (1/3)
IC3505 (4/4)
IC3505 (1/4)
IC3504 (1/3)
IC3504 (2/3)
IC3505 (3/4)
IC3503
IC3506
IC3504 (3/3)
IC3505 (2/4)
DS (SHADING)
IC5302 V OUT
IC5303 (1/2)
IC5303 (2/2)
IC5301 (2/2)
IC5301 (1/2)
Q5302, 5303 VDEF PROT. DELAY
Q5102, 5106 BUFF. HOUT DRV
T5101 HOT
Q5104 H OUT
Q5105 PIN AMP
IC5201 (1/4)
IC5201 (2/4)
IC5201 (3/4)
IC5201 (4/4)
T5103 FBT
Q5201 PROT
IC5703 (1/4)
IC5703 (2/4)
IC5703 (3/4)
Q5704, 5705 DF AMP
Q5006, 5009 HDEF PROT. DELAY
Q5706, 5707 G2 MUTE
Q5710, 5711 PROT
FOCUS PACK
R9901
IC5103 +12V REG
IC5104 -12V REG
IC5105 +5V REG
IC5106 -5V REG
IC5107 +9V REG
T5104 PMT
D (H/V-DEF, HV, DY DRIVE)
DS (SHADING)



M1 (SYSTEM CONTROL, TELE TEXT)

G (POWER SUPPLY)



G1 (POWER SUPPLY)

AC IN
110-240V
50/60Hz

CN6004
AC (L) 4
AC (W) 1

F6001
6.3A

T6001
LFT

T6002
LFT

CN6006
1 AC (L) IN
4 AC (N) IN

Z3 TO H1 BOARD CN3101 (43 inch model)
Z4 TO H1 BOARD CN3103 (48/53/61 inch model)

CN6007
5 AC (N) OUT
1 AC (L) OUT

a3 TO H1 BOARD CN3102 (43 inch model)
a4 TO H1 BOARD CN3104 (48/53/61 inch model)

T6004
PIT AUDIO

D6302
RECT

CN6301
1 +17V
2 -17V
L2 TO A1 BOARD CN1605

IC6303
OVP
REF 1
K 3

T6005
PIT

D6308
RECT

D6309
RECT

CN6302
1 +22V
2 -22V
3 15V
4 -15V
9 +6.5V
6 PROT
5 P.CONT
X2 TO D BOARD CN5013

D6310
RECT

D6301
RECT

D6015
RECT

RY6000

RY6001

Q6000
DBL RECT

Q6002
VCC SW

IC6004
SWITCHING IC
1 VD
15 VC2
18 VB
14 VC1
VS 19
VG (H) 2
COM 17
VG (L) 16
RT 7
CT 6

IC6007
MAIN SW

STBY+5V

IC6003
MAIN SW

Q6003
MAIN SW

Q6004
MCM SW

D6300
RECT

CN6303
3 +6.5V
4 +6.5V
5 +6.5V
9 +10.5V
10 +10.5V
K2 TO A1 BOARD CN1603

IC6002
RT SW

D6304
RECT

CN6304
1 +135V
Y2 TO D BOARD CN5002

IC6001
DC/DC CONVERTER
3 VCC
10 IN4-
11 IN4+
6 IN2-
7 IN2+
4 IN1-
5 IN1+
8 IN3-
9 IN3+
OUT4 13
OUT2 1
OUT1 2
OUT3 14

IC600
REF VOLTAGE
K 3
REF 1
A 2

Q6005
SWITCHING

IC6301
+B REG

T6100
SBT

IC6302
STBY 5V REG
IN 4
OUT 5
STBY +5V

CN6300
5 STBY +5V
2 OVP
3 OCP
1 AC ON/OFF
I2 TO A1 BOARD CN1606

Q6303
OCP

D6100
RECT

Q6100. 6102
PROTECT

Q6301. 6302
PROTECT

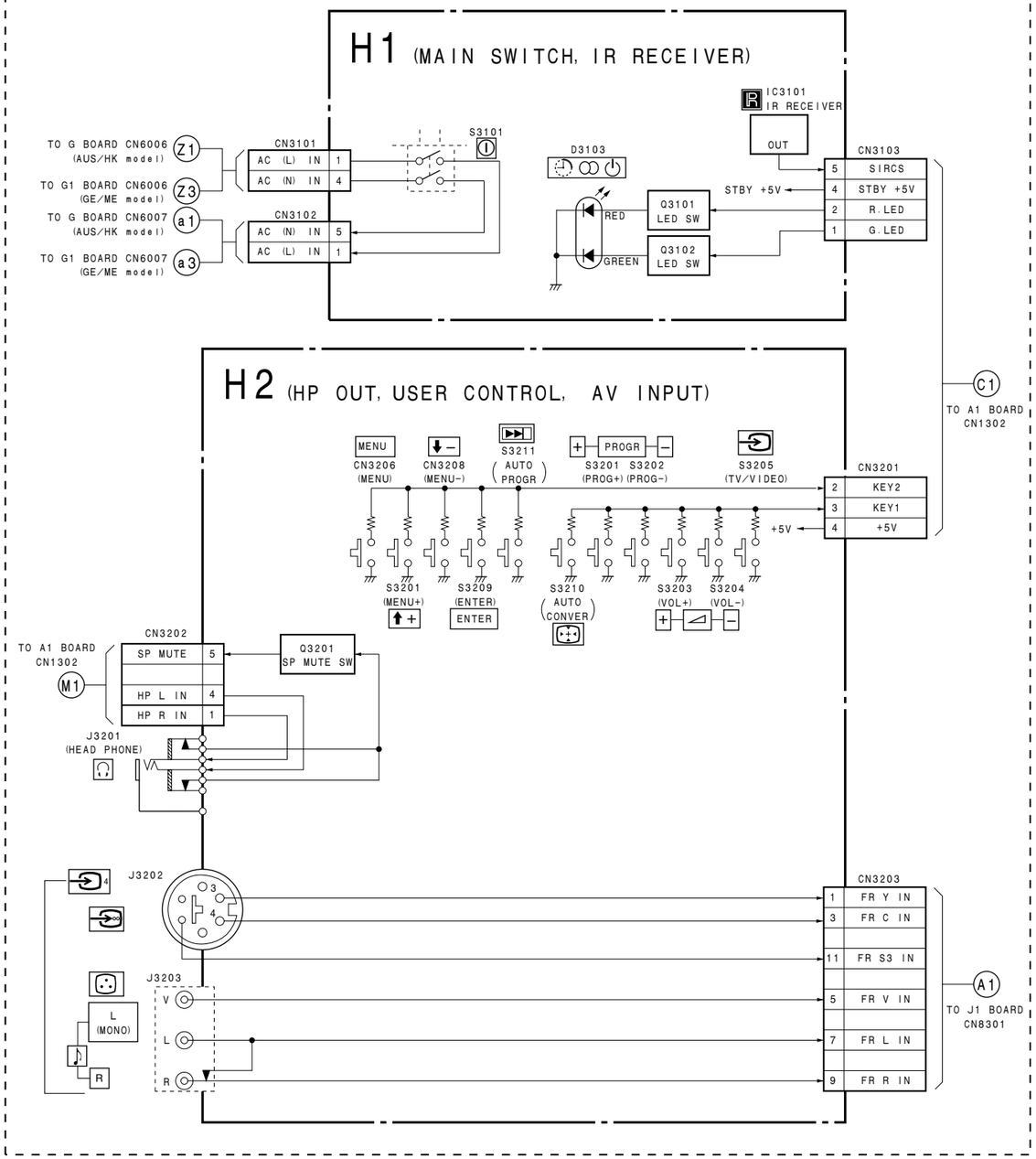
(NOT USED)

IC6005
MAIN SW

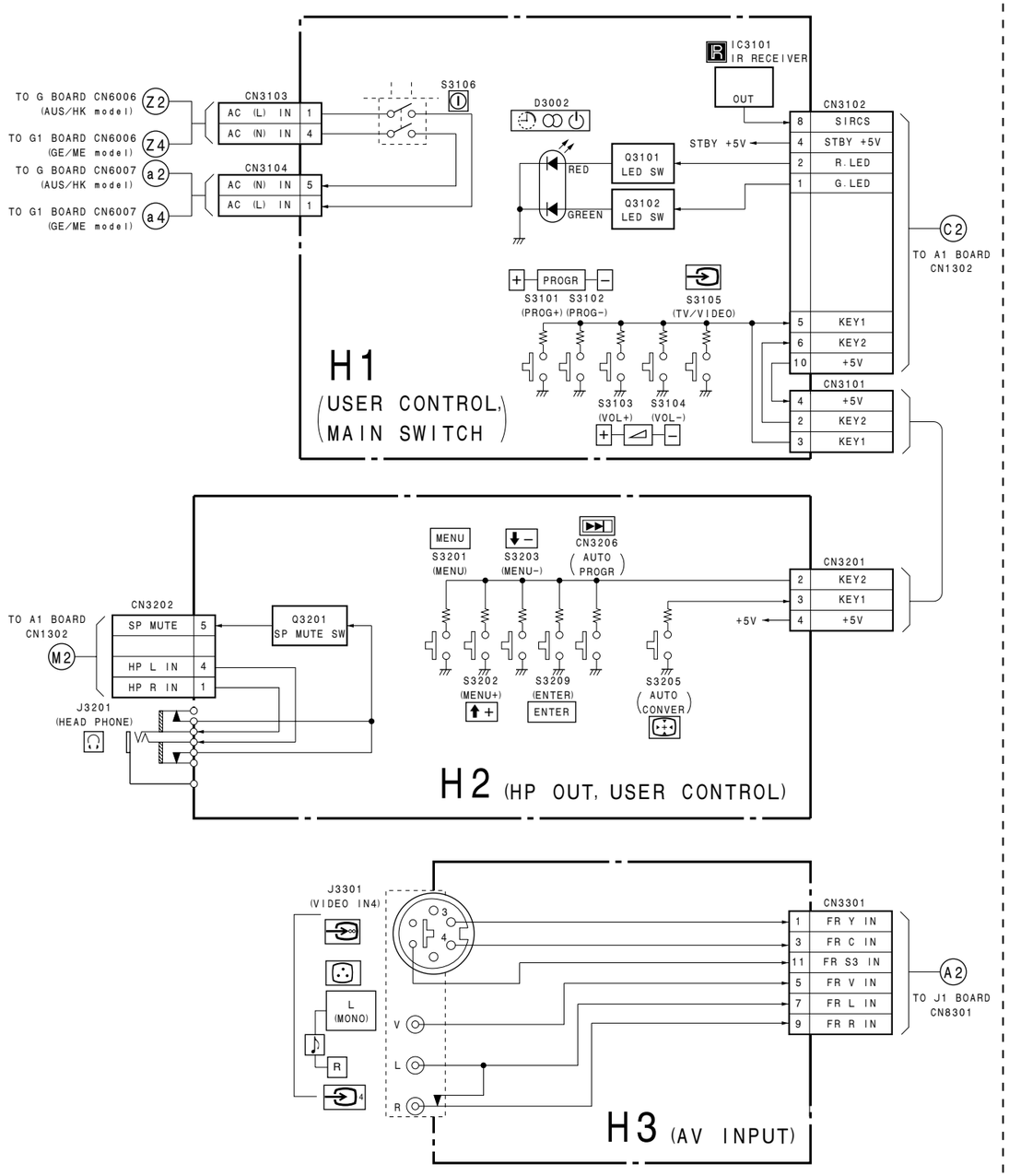
IC606
REF VOLTAGE
REF 1
K 3
A 2

Q6300
MAIN SW DRIVE

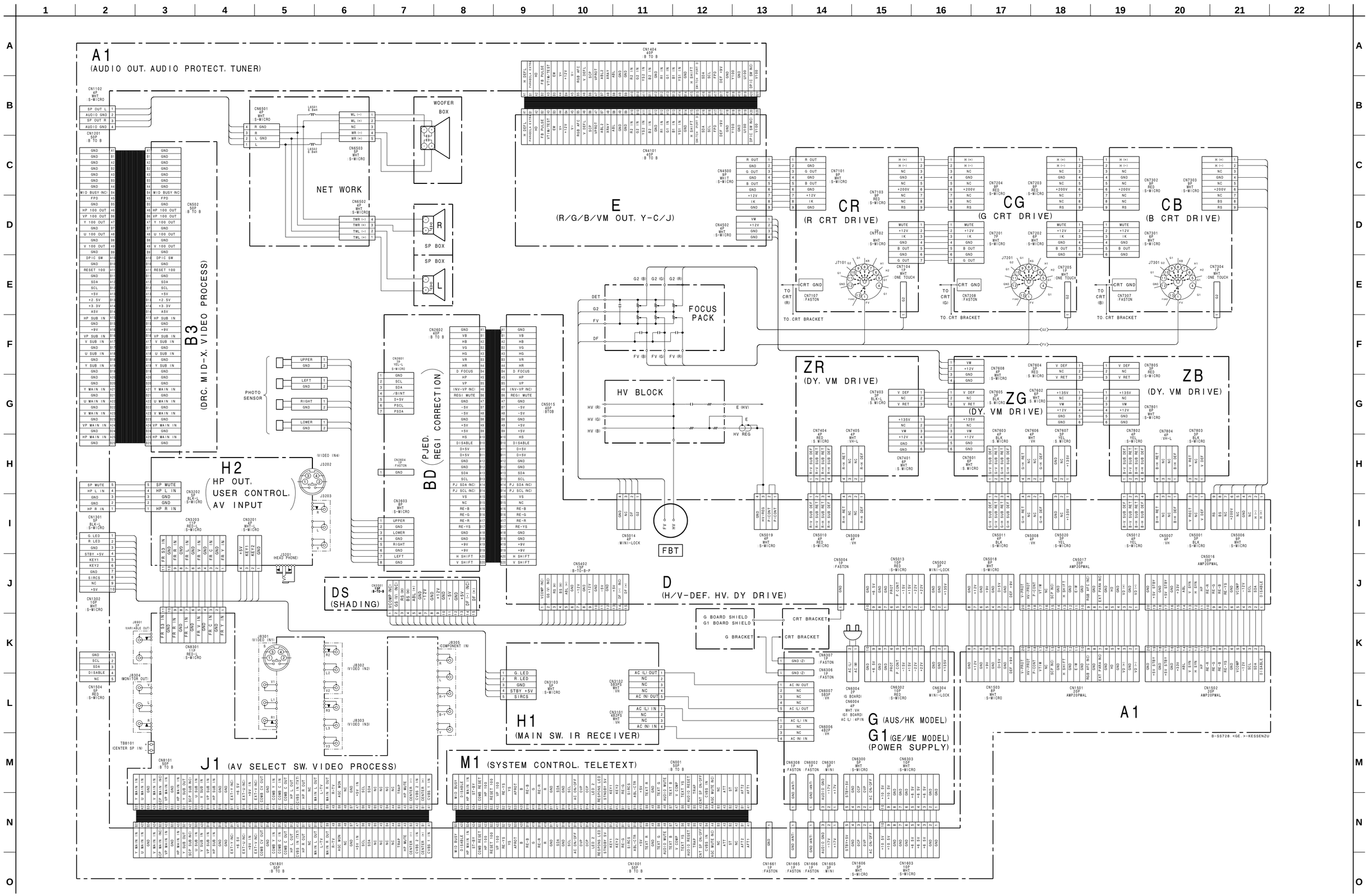
43inch model



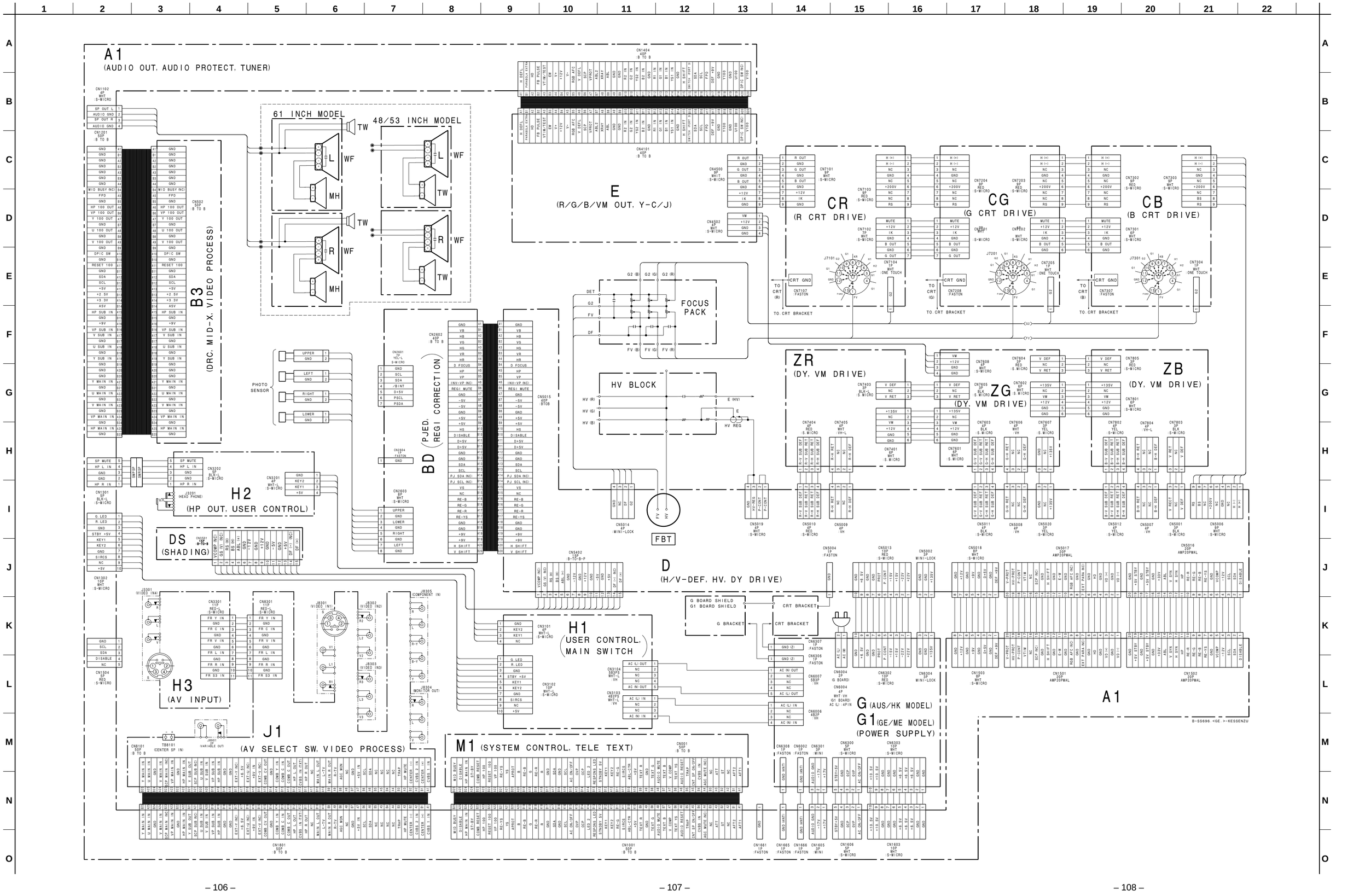
48/53/61inch model



7-2. FRAME SCHEMATIC DIAGRAM (1) (KP-ES43)

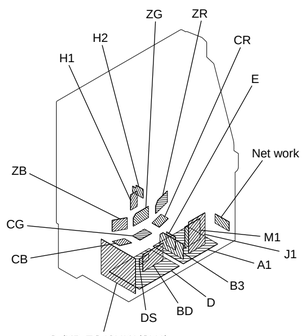


FRAME SCHEMATIC DIAGRAM (2) (KP-ES48/53/61)



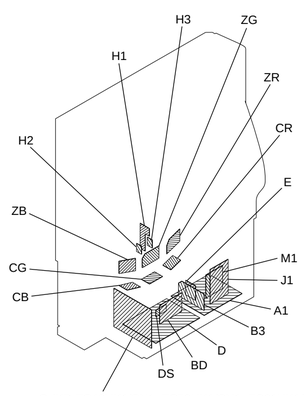
7-3. CIRCUIT BOARDS LOCATION

• **KP-ES43**



G (KP-ES43HK1/SN1)
G1 (KP-ES43ME1/MN1)

• **KP-ES48/ES53/ES61**



G (KP-ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
G1 (KP-ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)

7-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- The parts marked "#" on schematic diagrams are not mounted.
- All capacitors are in µF unless otherwise noted. (pF: µµF) Capacitors without voltage indication are all 50 V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- ∗ : Can not be measured.
- NO MARK: Common
- < > : SECAM
- ( ) : NTSC 3.58 MHz
- Circled numbers are waveform references.
- : B + bus.
- : B – bus.
- : Signal path.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Terminal name of semiconductors in silk screen printed circuit (∗)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor	T	Collector / Base / Emitter	
②	Transistor	—	Collector / Base / Emitter	
③	Diode		Cathode / Anode	
④	Diode	T	Cathode / Anode (NC)	
⑤	Diode	—	Cathode / Anode (NC)	
⑥	Diode	T	Common / Anode / Cathode	
⑦	Diode	—	Common / Anode Anode	
⑧	Diode	T	Common / Anode / Anode	
⑨	Diode	—	Common / Anode Anode	
⑩	Diode	T	Common / Cathode / Cathode	
⑪	Diode	—	Common / Cathode Cathode	
⑫	Diode	|	Anode Cathode / Anode Anode / Cathode Anode	
⑬	Transistor (FET)	|	Drain / Source / Gate	
⑭	Transistor (FET)	⊢	Drain / Source / Gate	
⑮	Transistor (FET)	|	□ Source □ Drain □ Gate	
⑯	Transistor	|	□ Emitter □ Collector □ Base	
–	Discrete semiconductot			

(Chip semiconductors that are not actually used are included.)

Ver.1.5

• **J1 BOARD SEMICONDUCTOR LOCATION**

IC

	(Component Side)	(Conductor Side)
IC8302	A-1	
IC8304		C-2
IC8305		C-1
IC8306	C-1	
IC8308	C-2	
IC8309	D-1	
IC8310	D-1	
IC8311	D-1	
IC8312	E-2	
IC8801	C-2	

TRANSISTOR

	(Component Side)	(Conductor Side)	∗
Q8301		A-2	①
Q8302		A-2	①
Q8303		A-2	①
Q8304		A-2	①
Q8306		A-2	①
Q8307	E-2		②
Q8308		A-2	①
Q8309		A-2	①
Q8316	D-2		②
Q8317	D-2		②
Q8318	D-2		②
Q8319	D-2		②
Q8321		B-1	①
Q8322		B-1	①
Q8323	D-2		②
Q8324	D-2		②
Q8326		D-2	①
Q8327		D-2	①
Q8328		D-2	①
Q8332	D-2		②
Q8338		D-2	①
Q8340	D-1		②
Q8401		C-1	①
Q8402		C-2	①
Q8405		D-2	①
Q8406		D-2	①
Q8407		D-2	①
Q8408		D-2	①
Q8409	E-1		②
Q8410	E-1		②
Q8411	E-1		②
Q8412	E-1		②
Q8413	E-1		②
Q8414	E-1		②
Q8415	E-1		②
Q8416	E-1		–
Q8417	E-1		–
Q8418	E-1		–
Q8419	D-2		–
Q8420	E-2		②
Q8421		D-1	①
Q8422	E-2		②
Q8423		D-1	①
Q8424	E-2		②
Q8425		D-2	①
Q8426		D-2	①
Q8601	C-1		②
Q8602	C-1		②
Q8603	C-1		②
Q8604	C-1		②
Q8605	C-2		②
Q8606	C-2		②
Q8607	C-2		②
Q8801	C-2		②
Q8802	C-2		②
Q8803		D-2	①
Q8804		D-1	①
Q8805	D-2		②
Q8807	D-2		②
Q8808	D-2		②
Q8809	D-2		②
Q8810	C-2		②
Q8811	C-2		②

DIODE

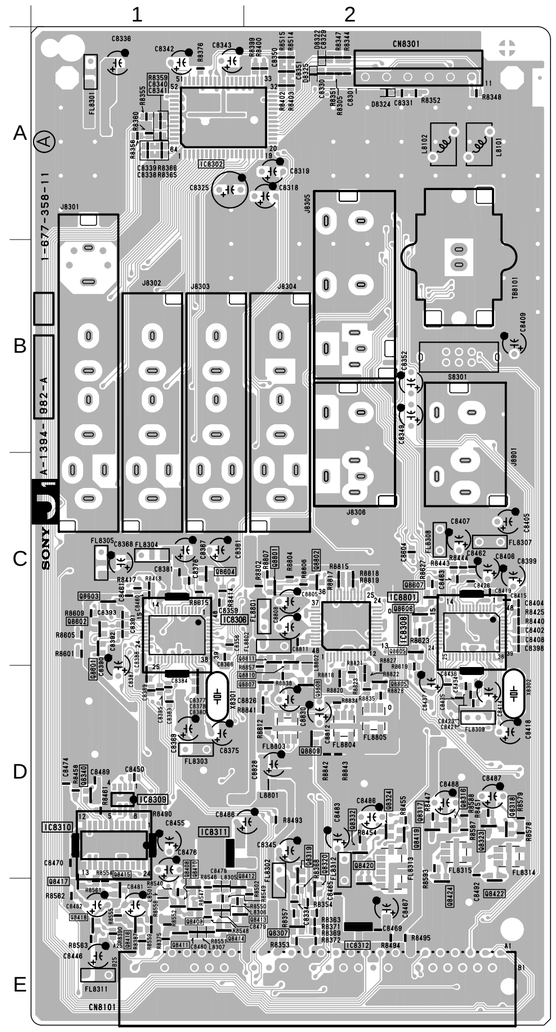
	(Component Side)	(Conductor Side)	∗
D8101		A-1	③
D8102		A-1	③
D8103		A-1	③
D8104		A-1	③
D8301		A-2	③
D8302		B-2	③
D8303		B-2	③
D8304		B-2	③
D8305		C-2	③
D8306		B-2	③
D8307		B-2	③
D8308		C-2	③
D8309		B-2	③
D8310		B-2	③
D8311		B-2	③
D8312		A-2	③
D8313		A-2	③
D8314		A-2	③
D8315		B-2	④
D8316		B-2	④
D8317		B-2	④
D8318		B-2	③
D8319		B-2	③
D8320		A-2	③
D8321		A-2	③
D8322	A-2		③
D8323		A-1	③
D8324	A-2		③
D8325	A-2		③
D8331		D-2	③
D8332		B-1	④
D8333		B-1	③
D8334		B-1	④
D8335		B-2	④
D8336		B-1	③
D8337		D-2	③

CRYSTAL

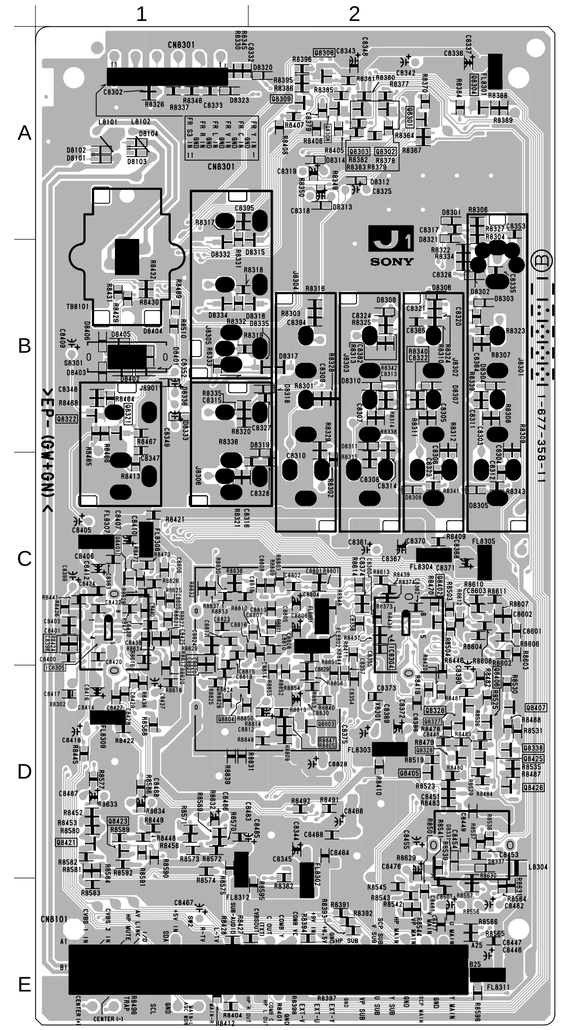
	(Component Side)	(Conductor Side)
X8301	D-1	
X8302	D-1	

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

– J1 Board – (Component Side)



(Conductor Side)



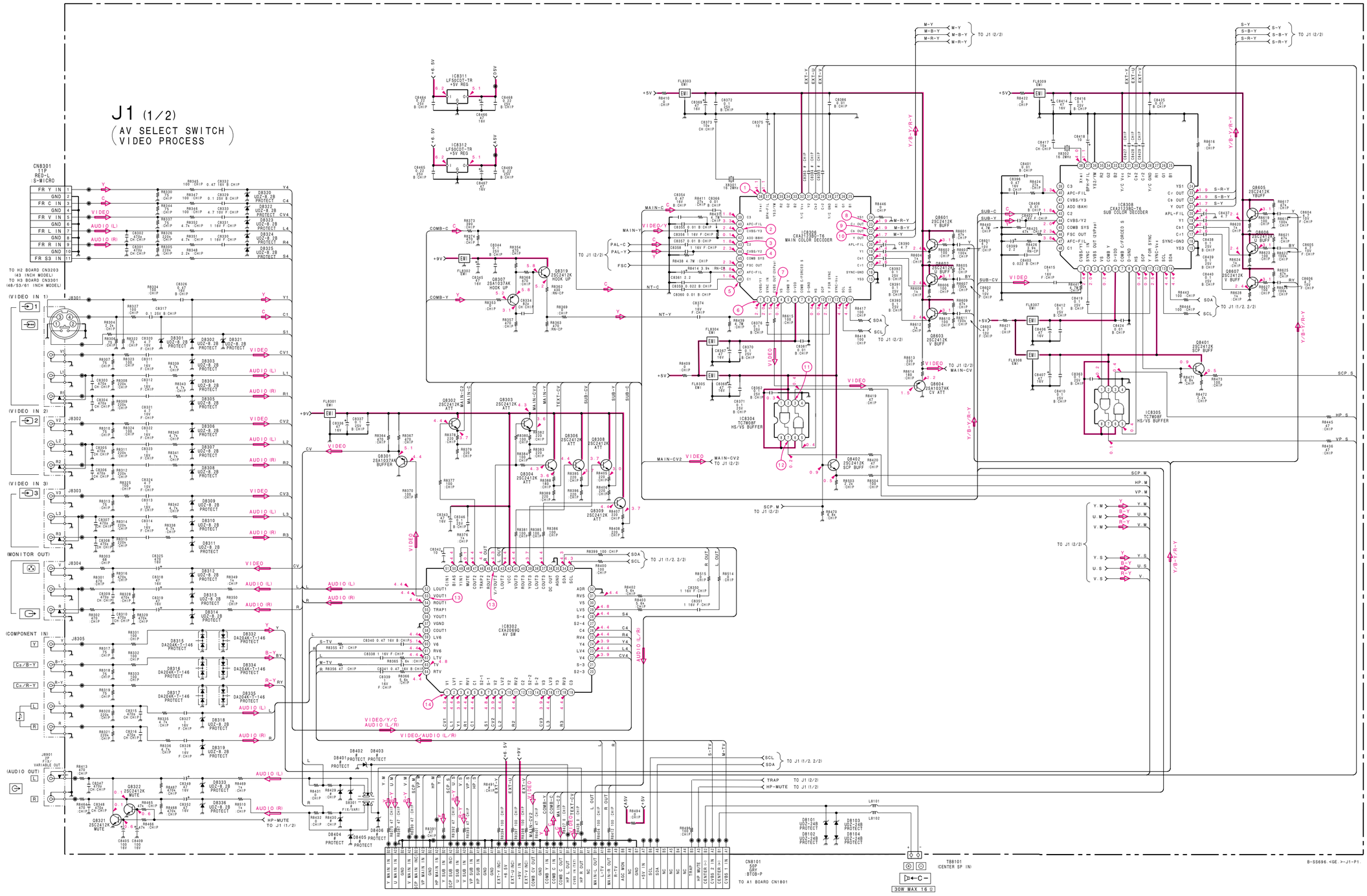
Schematic diagram J1 (1/2) board →

(1) Schematic Diagram of J1 (1/2) Board

- **J1 (1/2) BOARD WAVEFORMS**

①	② PAL/NTSC	② SECAM	③ PAL	③ SECAM	④ PAL/SECAM	⑤ NTSC	⑥ NTSC
0.3Vp-p (16.2MHz)	1.1Vp-p (H)	1.2Vp-p (H)	0.6Vp-p (H)	0.4Vp-p (H)	0.8Vp-p (H)	0.7Vp-p (H)	1.0Vp-p (H)

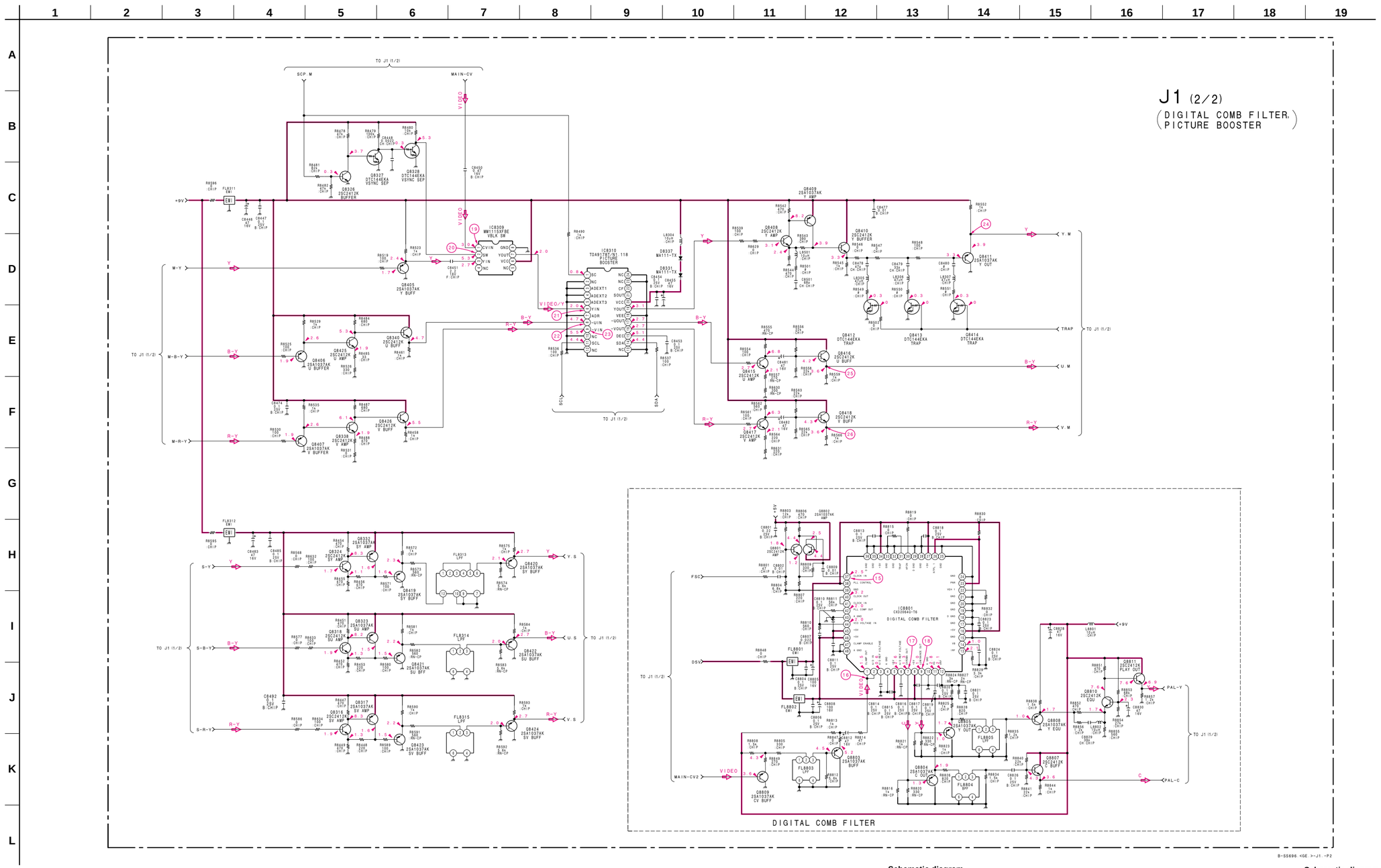
⑦ PAL/NTSC 2.1Vp-p (H)
⑦ SECAM 2.1Vp-p (H)
⑧ 0.8Vp-p (H)
⑨ 1.1Vp-p (H)
⑩ 1.1Vp-p (H)
⑪ 5.1Vp-p (H)
⑫ 5.0Vp-p (V)
⑬ PAL/NTSC 2.1Vp-p (H)
⑬ SECAM 2.2Vp-p (H)
⑭ PAL/NTSC 1.0Vp-p (H)
⑭ SECAM 1.0 Vp-p (H)



• **J1 (2/2) BOARD WAVEFORMS**

⑮ PAL: 0.8Vp-p (4.43MHz) SECAM: 0.8Vp-p (4.43MHz) NTSC: 0.9Vp-p (3.58MHz)	⑯ PAL 1.6Vp-p (H)	⑯ SECAM 1.6Vp-p (H)	⑰ PAL 1.3Vp-p (H)	⑰ SECAM 1.0Vp-p (H)	⑱ PAL/SECAM 1.6Vp-p (H)	⑲ PAL/NTSC 1.1Vp-p (H)	⑲ SECAM 1.0Vp-p (H)
⑳ 0.7Vp-p (H)	㉑ 0.7Vp-p (H)	㉒ 1.2Vp-p (H)	㉓ 1.0Vp-p (H)	㉔ 1.3Vp-p (H)	㉕ 1.2Vp-p (H)	㉖ 1.2Vp-p (H)	

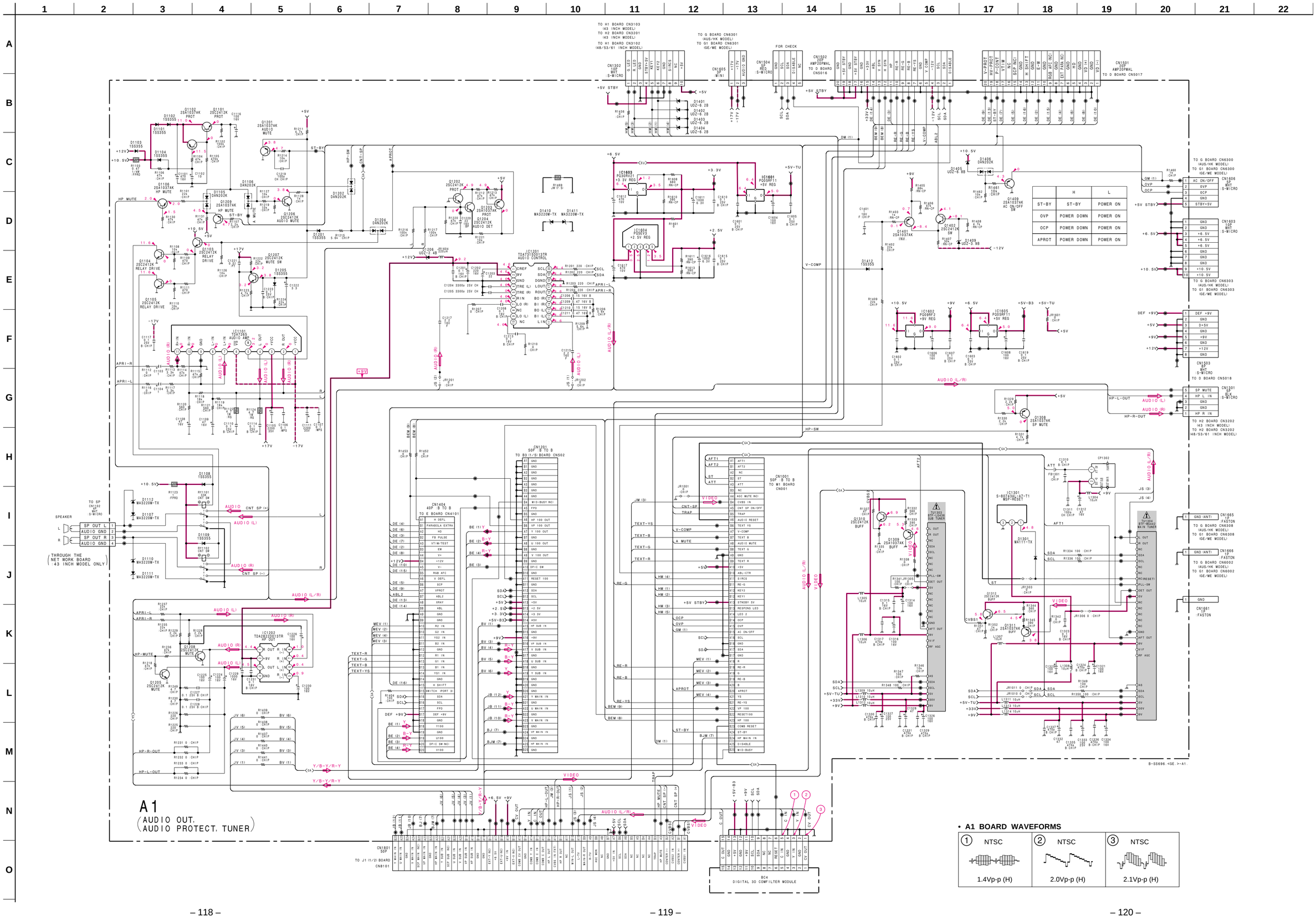
(2) Schematic Diagram of J1 (2/2) Board



Schematic diagram ← J1 (2/2) board

Schematic diagram A1 board →

(3) Schematic Diagram of A1 Board



• A1 BOARD SEMICONDUCTOR LOCATION

IC

	(Component Side)	(Conductor Side)
IC1101		D-3
IC1201		C-3
IC1202		C-3
IC1301		B-5
IC1601	E-2	E-4
IC1602	E-1	E-4
IC1603	E-3	E-3
IC1604	E-4	E-3
IC1605	E-1	E-5

TRANSISTOR

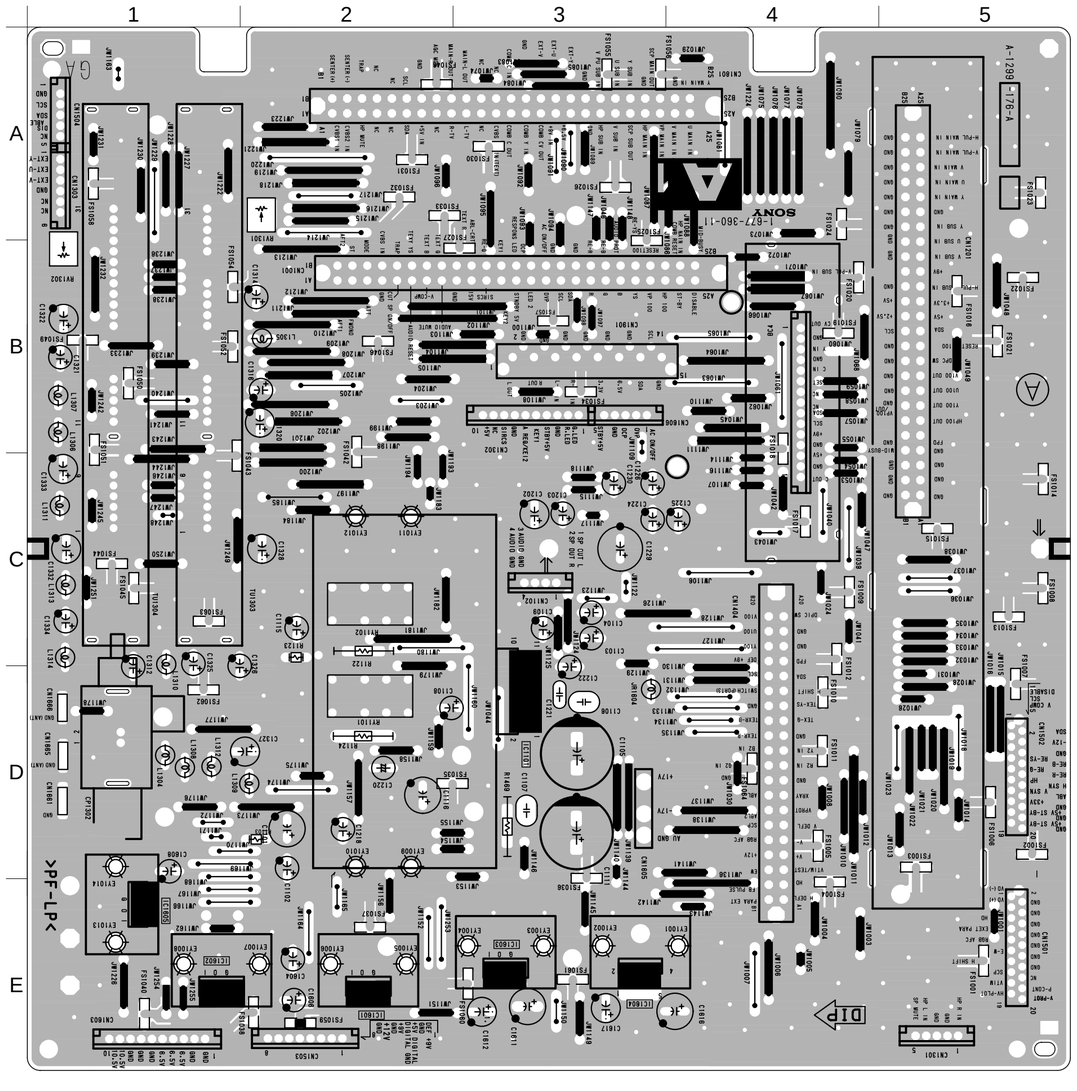
	(Component Side)	(Conductor Side)	✱
Q1101		D-4	①
Q1102		D-4	①
Q1103		D-4	①
Q1104		D-4	①
Q1105		C-4	①
Q1106		D-4	①
Q1201		D-4	①
Q1202		D-4	①
Q1203		D-4	①
Q1204		D-4	①
Q1205		C-2	①
Q1206		D-4	①
Q1207		D-3	①
Q1208		C-3	①
Q1209		D-3	①
Q1308		E-2	①
Q1309		A-4	①
Q1310		B-4	①
Q1311		B-5	①
Q1312		B-5	①
Q1401		E-3	①
Q1402		E-3	①
Q1409		B-2	①

DIODE

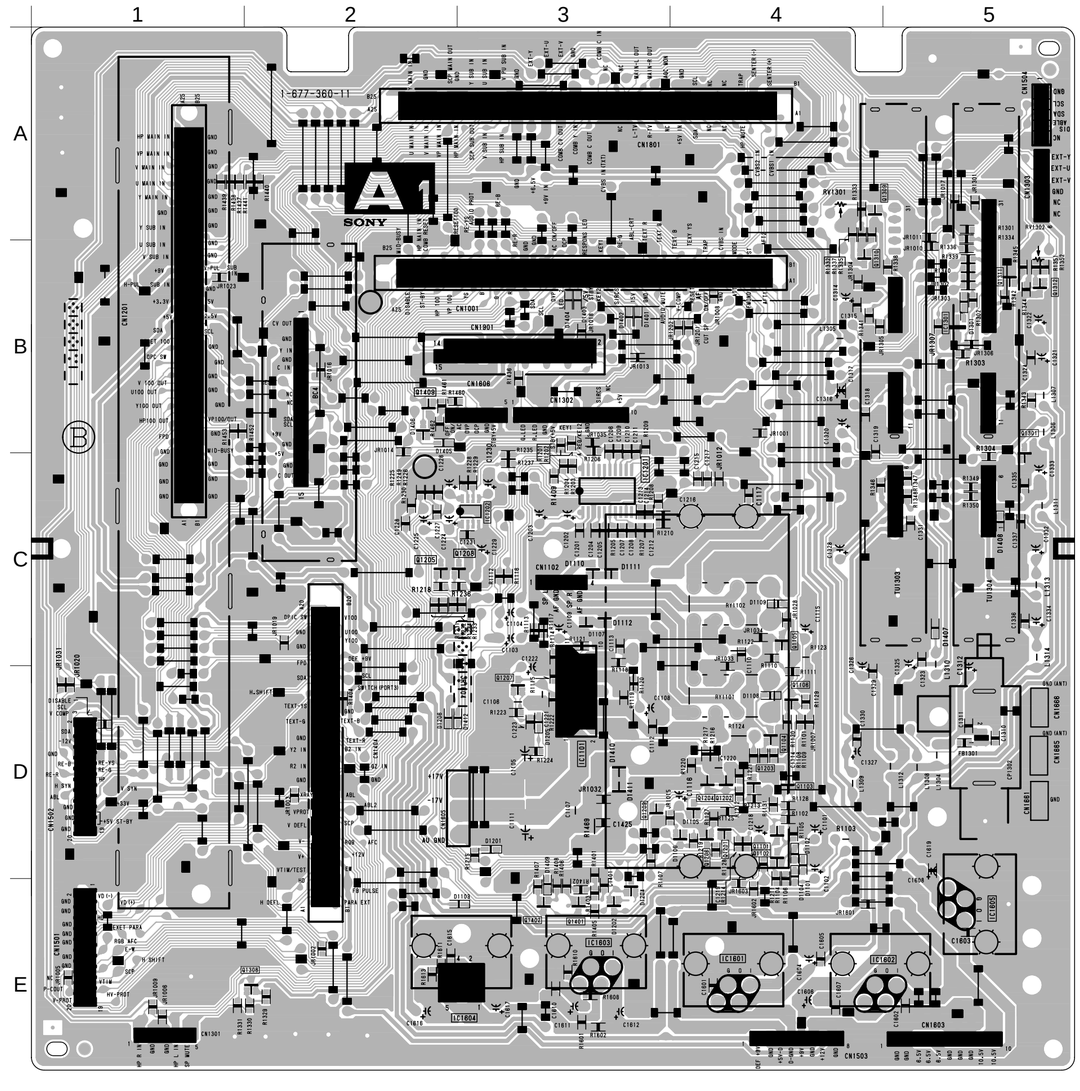
	(Component Side)	(Conductor Side)	✱
D1101		D-4	③
D1102		D-4	③
D1104		D-4	③
D1105		D-4	④
D1106		D-4	④
D1107		C-3	④
D1108		D-4	③
D1109		C-4	③
D1110		C-3	④
D1111		C-3	④
D1112		C-3	④
D1201		D-3	③
D1202		E-3	④
D1204		E-3	④
D1205		D-3	③
D1206		D-2	③
D1301		B-5	③
D1401		B-3	③
D1402		B-3	③
D1403		B-3	③
D1404		B-3	③
D1405		B-2	③
D1406		B-2	④
D1409		E-3	③
D1410		D-3	③
D1411		D-3	③
D1412		D-2	③

✱: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

– A1 Board – (Component Side)



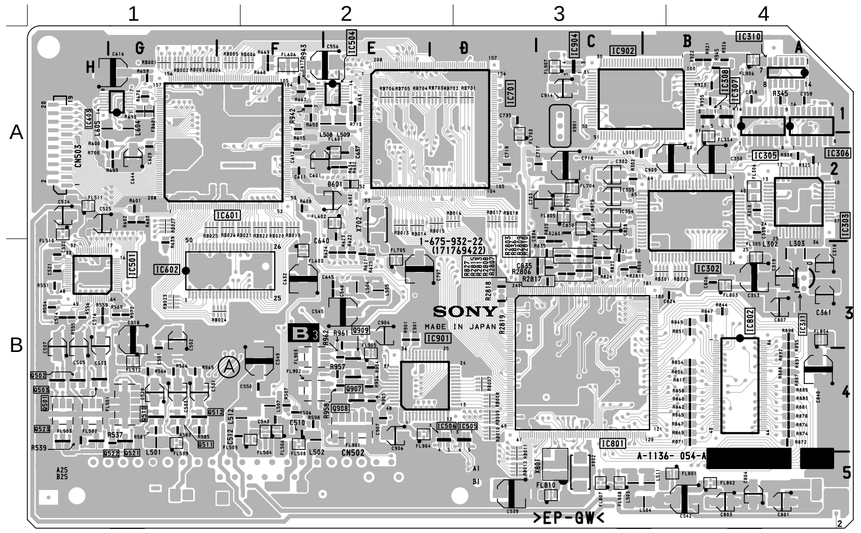
(Conductor Side)



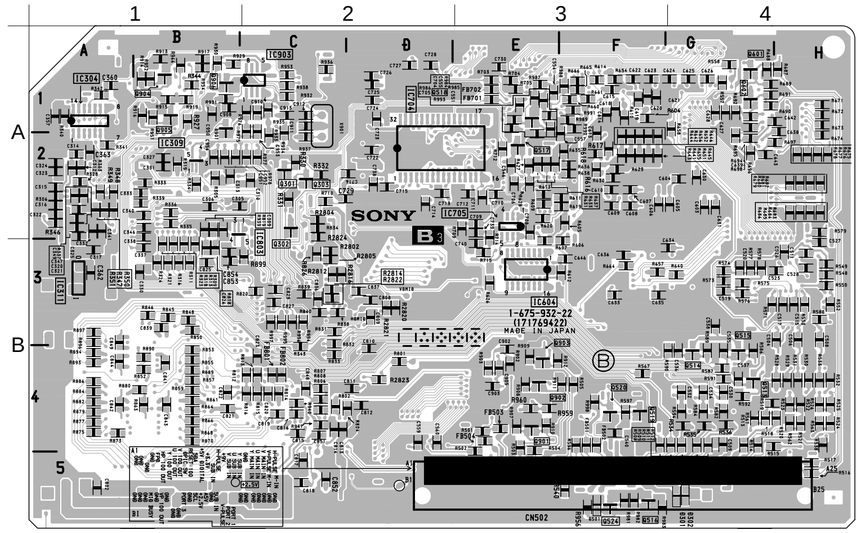
Schematic diagram B3 (1/5)board ➡

B3 [DRC, MID-X, VIDEO PROCESS]

– B3 Board – (Component Side)



(Conductor Side)



• B3 BOARD SEMICONDUCTOR LOCATION

IC

	(Component Side)	(Conductor Side)
IC302	A-4	
IC303	A-4	
IC309		A-1
IC311	B-4	B-1
IC501	B-1	
IC504	A-2	
IC505	B-3	
IC506	B-2	
IC601	A-1	
IC602	B-1	
IC603	A-1	
IC604		B-3
IC801	B-3	
IC802	B-4	
IC803		A-2
IC901	B-2	
IC902	A-3	
IC903		A-2
IC904	A-3	

TRANSISTOR

	(Component Side)	(Conductor Side)	✻
Q301		A-2	①
Q302		A-2	①
Q303		A-2	①
Q501	B-1		②
Q502	B-1		②
Q503	B-1		②
Q510	B-1		②
Q511	B-1		②
Q512	B-1		②
Q516		B-3	①
Q517		A-3	①
Q518		A-3	①
Q519		B-3	①
Q520		B-3	①
Q521	B-1		②
Q522	B-1		②
Q523	B-1		②
Q524		B-3	①
Q601		A-4	①
Q602		A-4	①
Q901		B-3	①
Q902		B-3	①
Q903		B-3	①
Q904		A-1	⑩
Q905		A-1	⑩
Q906		A-1	②
Q907	B-2		②
Q908	B-2		②
Q909	B-2		②

DIODE

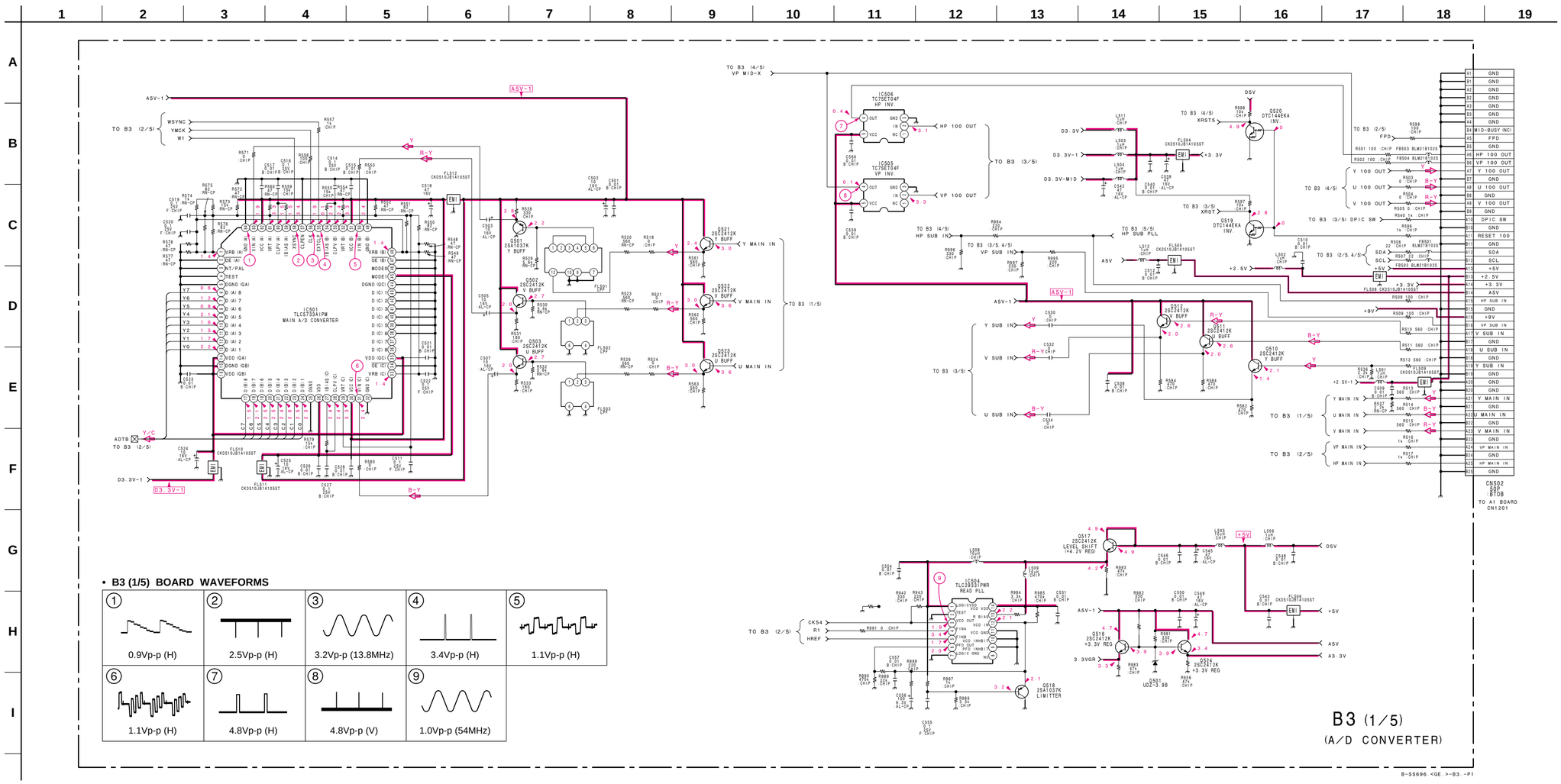
	(Component Side)	(Conductor Side)	✻
D301		B-4	③
D302		B-4	③
D501		B-3	③
D601	A-2		③

CRYSTAL

	(Component Side)	(Conductor Side)
X801	B-3	
X802	B-3	
X901	A-3	

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

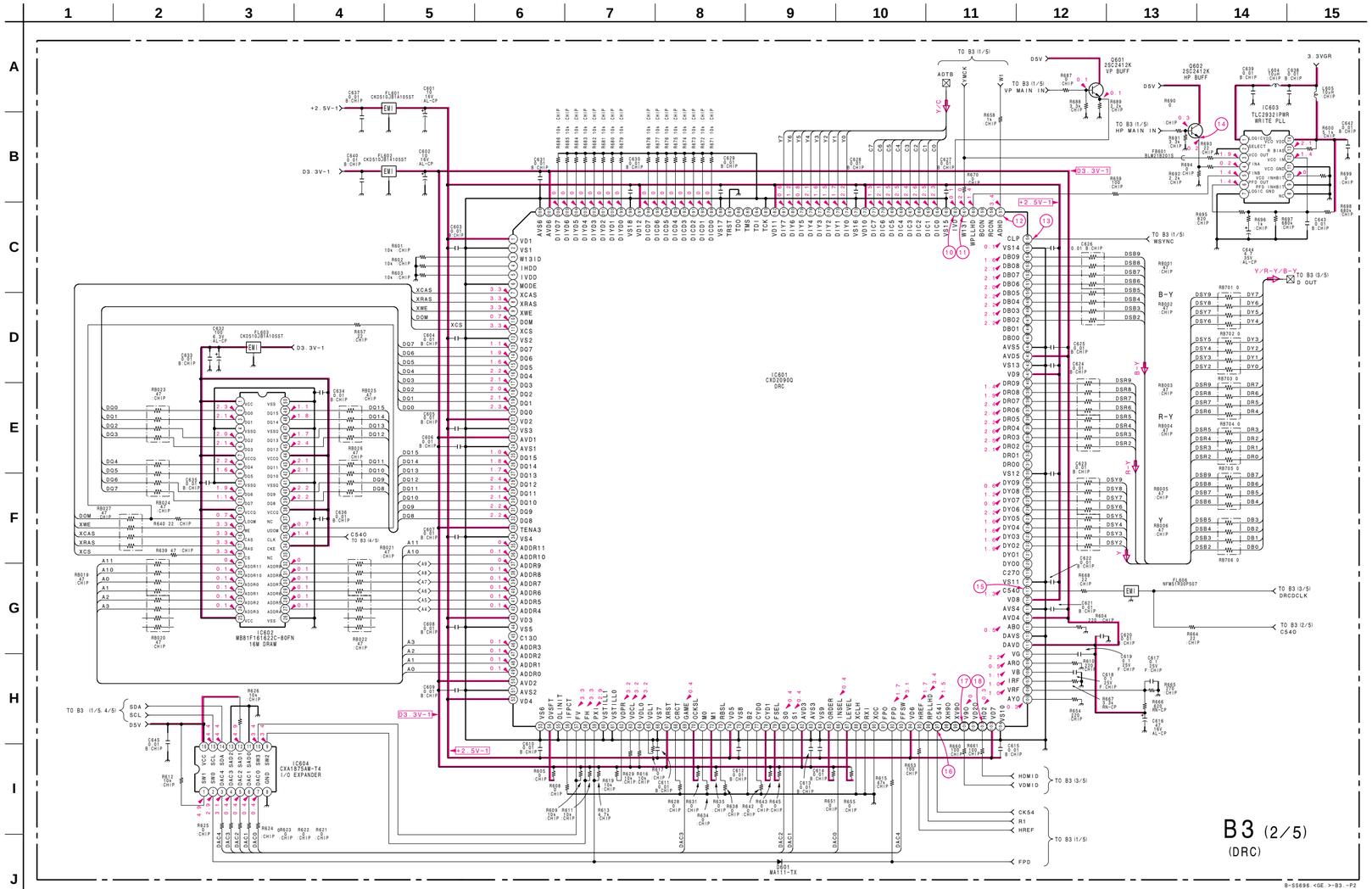
(4) Schematic Diagram of B3 (1/5) Board



• B3 (1/5) BOARD WAVEFORMS

① 0.9Vp-p (H)	② 2.5Vp-p (H)	③ 3.2Vp-p (13.8MHz)	④ 3.4Vp-p (H)	⑤ 1.1Vp-p (H)
⑥ 1.1Vp-p (H)	⑦ 4.8Vp-p (H)	⑧ 4.8Vp-p (V)	⑨ 1.0Vp-p (54MHz)	

(5) Schematic Diagram of B3 (2/5) Board



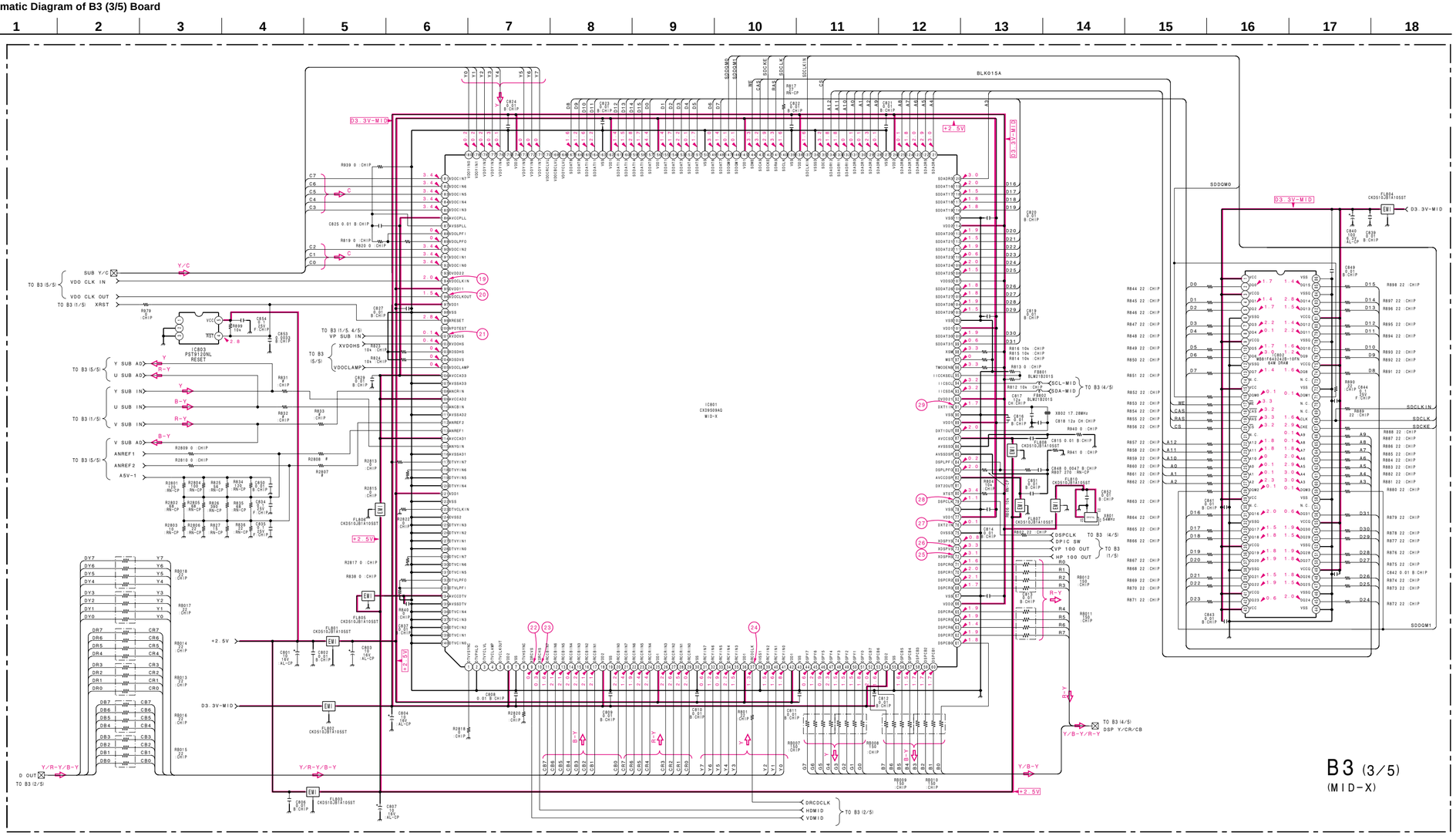
• **B3 (2/5) BOARD WAVEFORMS**

⑩ 3.1Vp-p (V)	⑪ 3.5Vp-p (13.8MHz)	⑫ 3.4Vp-p (H)	⑬ 3.4Vp-p (H)
⑭ 3.2Vp-p (H)	⑮ 1.1Vp-p (54MHz)	⑯ 1.0Vp-p (54MHz)	⑰ 3.5Vp-p (V)
⑱ 3.4Vp-p (H)			

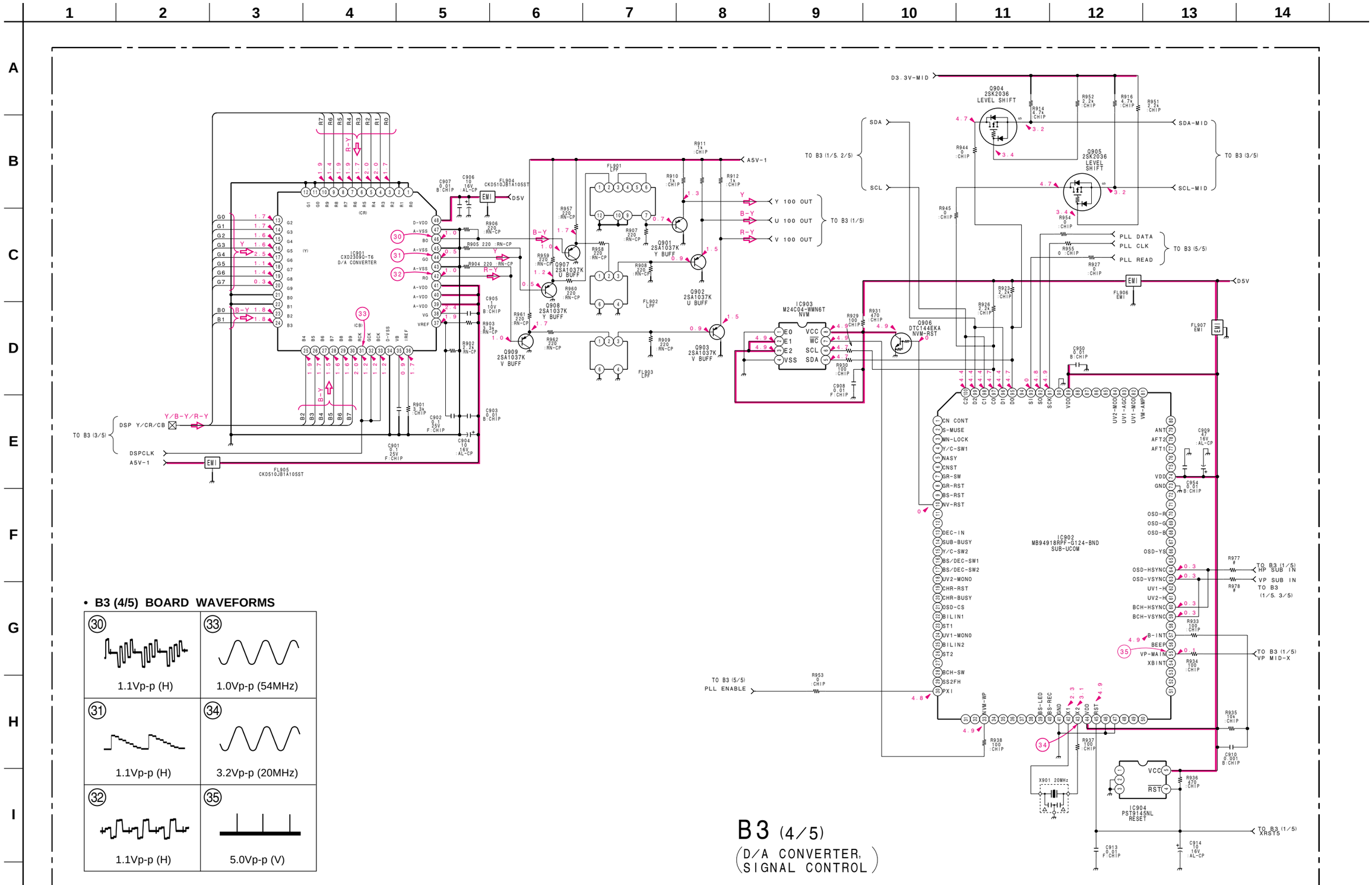
(6) Schematic Diagram of B3 (3/5) Board

• **B3 (3/5) BOARD WAVEFORMS**

⑲ 2.7Vp-p (23MHz)	㉕ 3.4Vp-p (H)
⑳ 1.2Vp-p (68.7MHz)	㉖ 3.4Vp-p (V)
㉑ 1.9Vp-p (V)	㉗ 1.4Vp-p (54MHz)
㉒ 3.4Vp-p (V)	㉘ 1.1Vp-p (54MHz)
㉓ 3.4Vp-p (H)	㉙ 1.5Vp-p (17.3MHz)
㉔ 1.1Vp-p (54MHz)	



(7) Schematic Diagram of B3 (4/5) Board



• **B3 (4/5) BOARD WAVEFORMS**

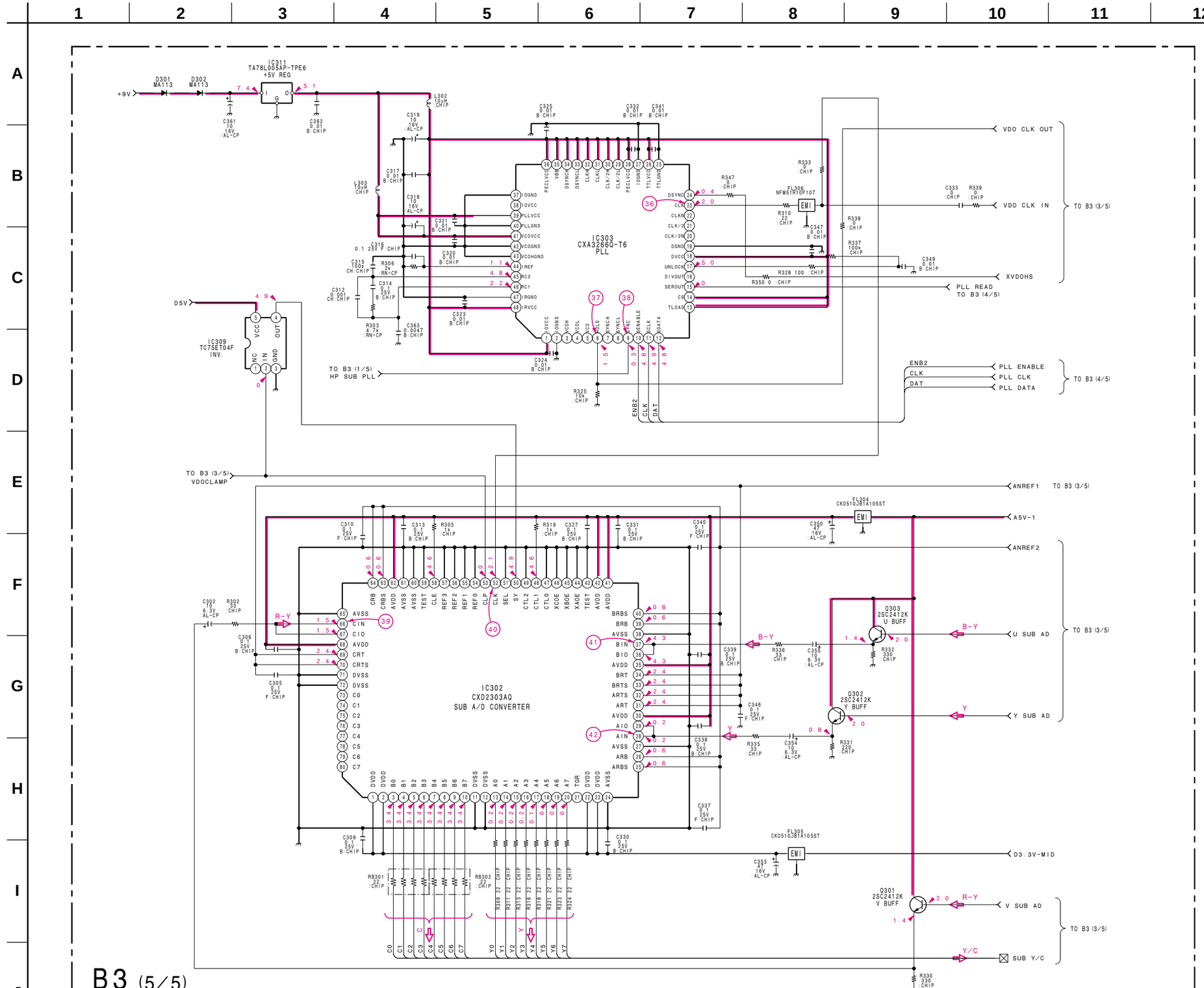
㉚ 1.1Vp-p (H)	㉝ 1.0Vp-p (54MHz)
㉛ 1.1Vp-p (H)	㉞ 3.2Vp-p (20MHz)
㉜ 1.1Vp-p (H)	㉟ 5.0Vp-p (V)

B-SS696.<GE.>-B3.-P4

(8) Schematic Diagram of B3 (5/5) Board

• B3 (5/5) BOARD WAVEFORMS

㊱ 2.9Vp-p (23MHz)	㊵ 2.7Vp-p (23MHz)
㊲ 1.2Vp-p (68.7MHz)	㊶ 0.9Vp-p (H)
㊳ 3.8Vp-p (H)	㊷ 1.0Vp-p (H)
㊴ 1.0Vp-p (H)	



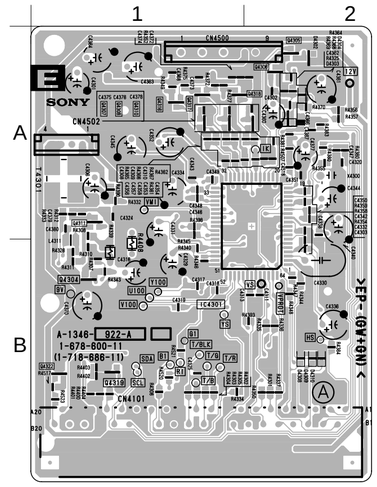
Schematic diagram

← B3 **(4/5) board**

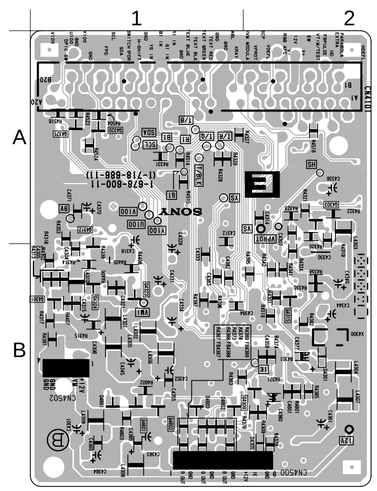
• **E BOARD WAVEFORMS**

① 0.5Vp-p (H)	② 0.6Vp-p (H)	③ 0.6Vp-p (H)	④ 5.0Vp-p (H)	⑤ 4.9Vp-p (V)
⑥ 1.5Vp-p (V)	⑦ 1.5Vp-p (V)	⑧ 0.1Vp-p (503.5kHz)	⑨ 5.7Vp-p (H)	⑩ 2.3Vp-p (H)
⑪ 2.3Vp-p (H)	⑫ 2.2Vp-p (H)	⑬ 2.3Vp-p (H)		

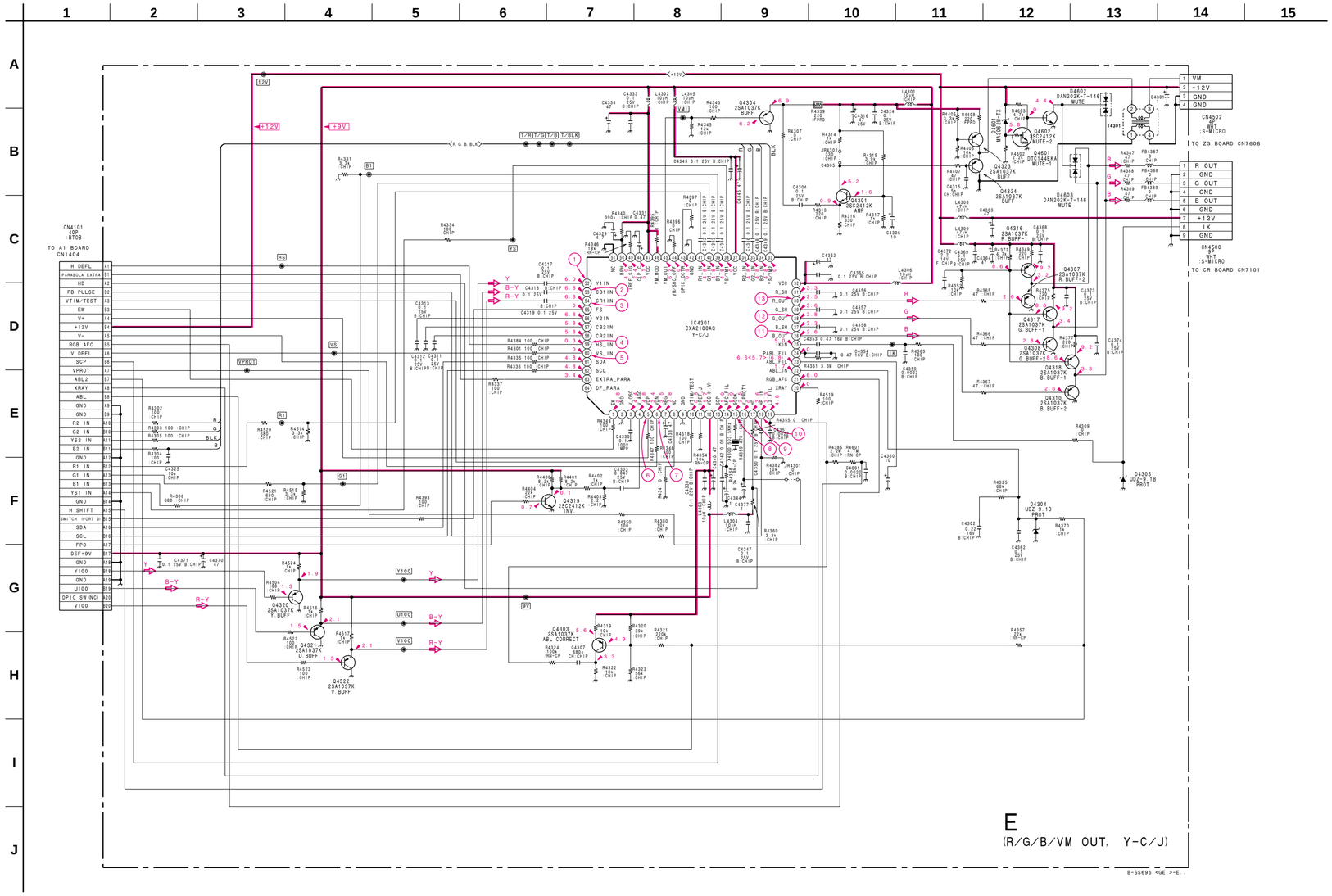
– E Board – (Component Side)



(Conductor Side)



(9) Schematic Diagram of E Board



• **E BOARD SEMICONDUCTOR LOCATION**

IC	(Component Side)	(Conductor Side)
IC4301	A-2	

TRANSISTOR	(Component Side)	(Conductor Side)	✻
Q4301		B-1	①
Q4303		A-2	①
Q4304	B-1		②
Q4307	A-1		②
Q4308	A-1		②
Q4310	A-2		②
Q4316	A-1		②
Q4317	A-1		②
Q4318	A-1		②
Q4319	B-1		②
Q4320		A-1	①
Q4321		A-1	①
Q4322	B-1		②
Q4323		B-1	①
Q4324		B-1	①
Q4601		B-1	①
Q4602		B-1	①

DIODE	(Component Side)	(Conductor Side)	✻
D4304	A-2		③
D4305		B-2	③
D4601		B-1	④
D4602		B-1	④
D4603		B-1	④

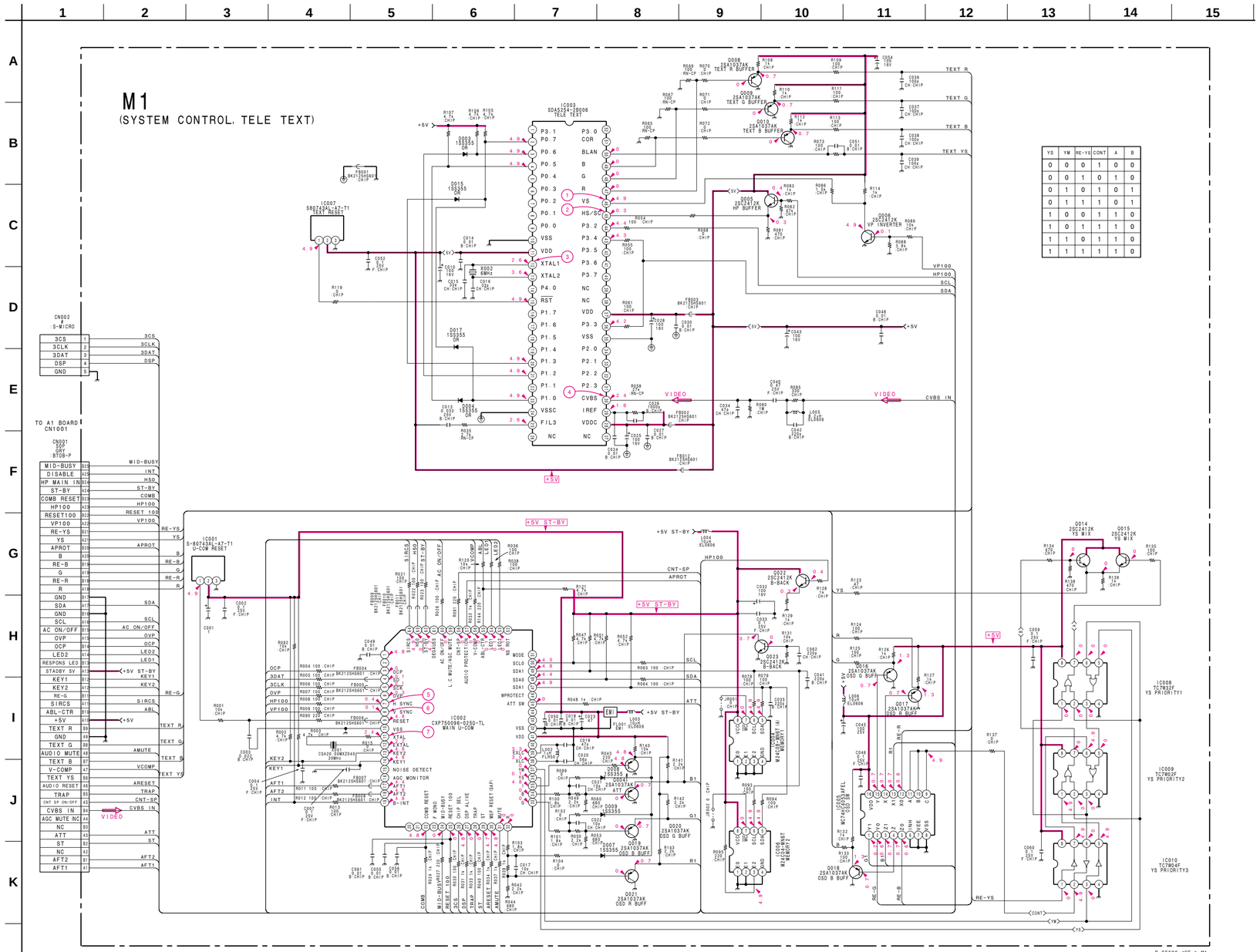
CRYSTAL	(Component Side)	(Conductor Side)
X4300		B-2

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

• **M1 BOARD WAVEFORMS**

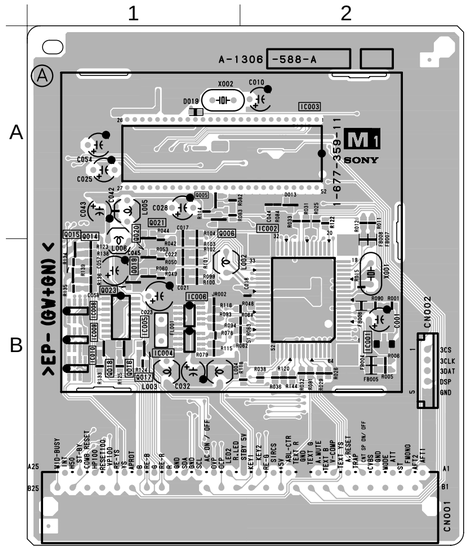
① 4.6Vp-p (V)	② 4.1Vp-p (H)	③ 3.4Vp-p (6MHz)	④ PAL/NTSC 1.2Vp-p (H)
④ SECAM 1.2Vp-p (H)	⑤ 4.8Vp-p (H)	⑥ 4.9Vp-p (V)	⑦ 2.3Vp-p (20MHz)

(10) Schematic Diagram of M1 Board

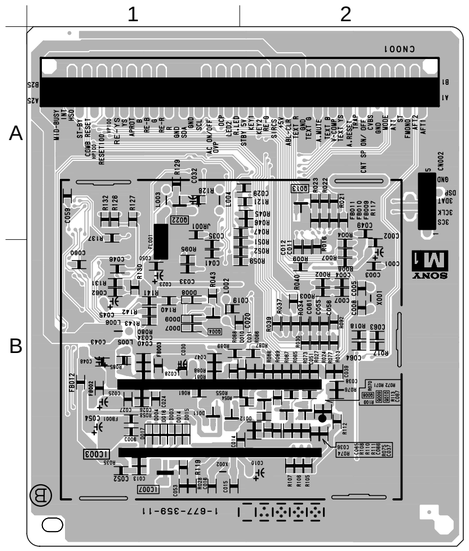


YS	YM	RE-YS	CONT	A	B
0	0	0	1	0	0
0	0	1	0	1	0
0	1	0	1	0	1
0	1	1	1	0	1
1	0	0	1	1	0
1	0	1	1	1	0
1	1	0	1	1	0
1	1	1	1	1	0

– M1 Board – (Component Side)



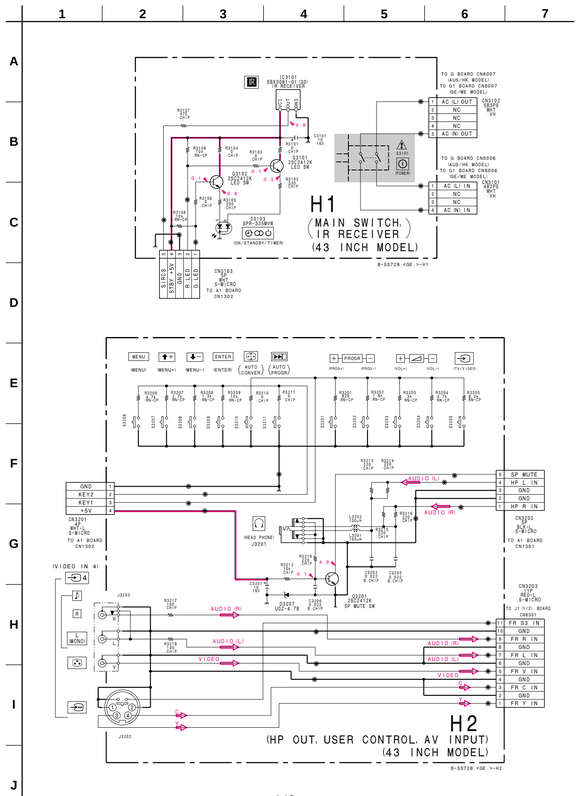
(Conductor Side)



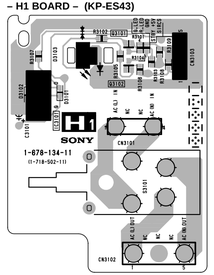
• **M1 BOARD SEMICONDUCTOR LOCATION**

IC			TRANSISTOR			DIODE		
	(Component Side)	(Conductor Side)		(Component Side)	(Conductor Side) ✻		(Component Side)	(Conductor Side) ✻
IC001	B-2		Q004		B-2 ①	D003	A-2	③
IC002	B-2		Q005	A-1	②	D004	A-2	③
IC003	A-1	B-1	Q006	A-1	②	D007	A-2	③
IC004	B-1		Q008		B-2 ①	D008	A-2	③
IC005	B-1		Q009		B-2 ①	D009	A-2	③
IC006	B-1		Q010		B-2 ①	D015	A-2	③
IC007		B-1	Q014	B-1	②	D017	A-2	③
IC008	B-1		Q015	B-1	②			
IC009	B-1		Q016	B-1	②	CRYSTAL		
IC010	B-1		Q017	B-1	②		(Component Side)	(Conductor Side)
			Q018	B-1	②	X001	B-2	
			Q019	B-1	②	X002	A-1	
			Q020	B-1	②			
			Q021	A-1	②			
			Q022		A-1 ①			
			Q023	B-1	②			

✻: **Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)**



– H1 BOARD – (KP-ES43)

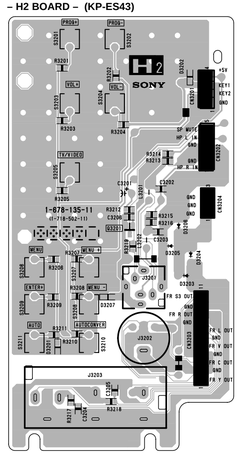


H1 BOARD
Terminal name of semiconductors in silk screen printed circuit (✻)

Ref.	✻
D3103	③
Q3101, 3102	①

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

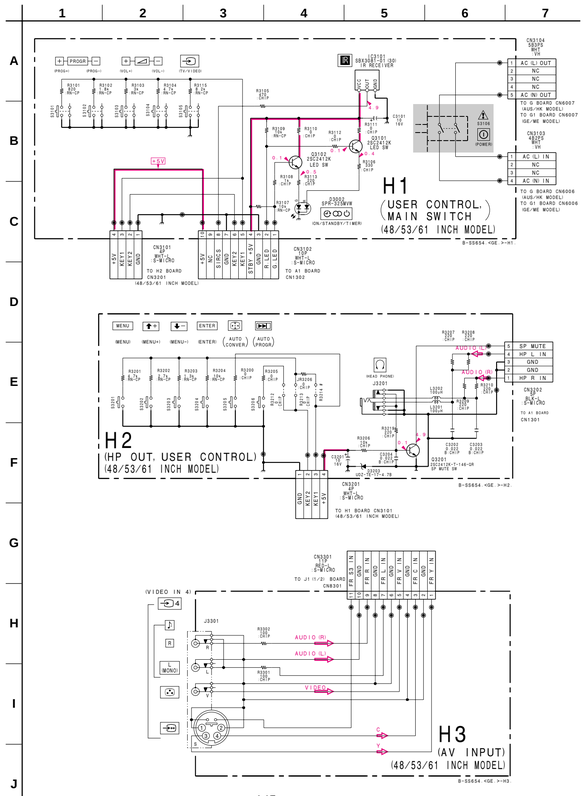
– H2 BOARD – (KP-ES43)



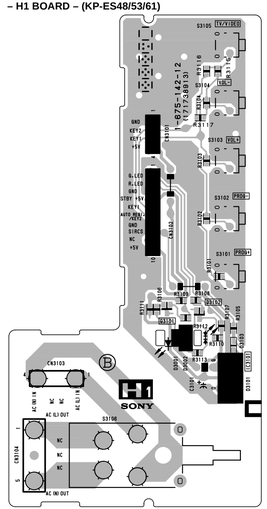
H2 BOARD
Terminal name of semiconductors in silk screen printed circuit (✻)

Ref.	✻
D3207	③
Q3201	①

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)



– H1 BOARD – (KP-ES48/53/61)

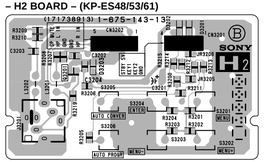


H1 BOARD
Terminal name of semiconductors in silk screen printed circuit (✻)

Ref.	✻
Q3101, Q3102	①

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

– H2 BOARD – (KP-ES48/53/61)

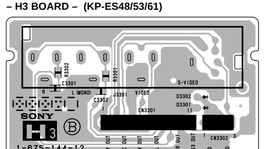


H2 BOARD
Terminal name of semiconductors in silk screen printed circuit (✻)

Ref.	✻
D3203	③
Q3201	①

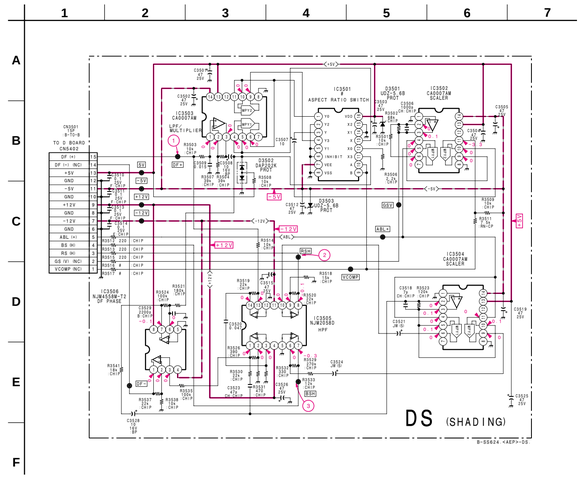
✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

– H3 BOARD – (KP-ES48/53/61)

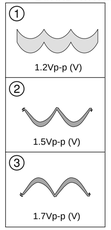


(13) Schematic Diagram of DS Board

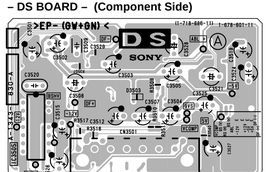
DS [SHADING]



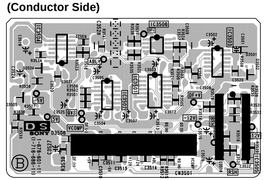
• DS BOARD WAVEFORMS



– DS BOARD – (Component Side)



(Conductor Side)



DS BOARD
Terminal name of semiconductors in silk screen printed circuit (✻)

Ref.	✻
D3501, D3503	③
D3502	⑯

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

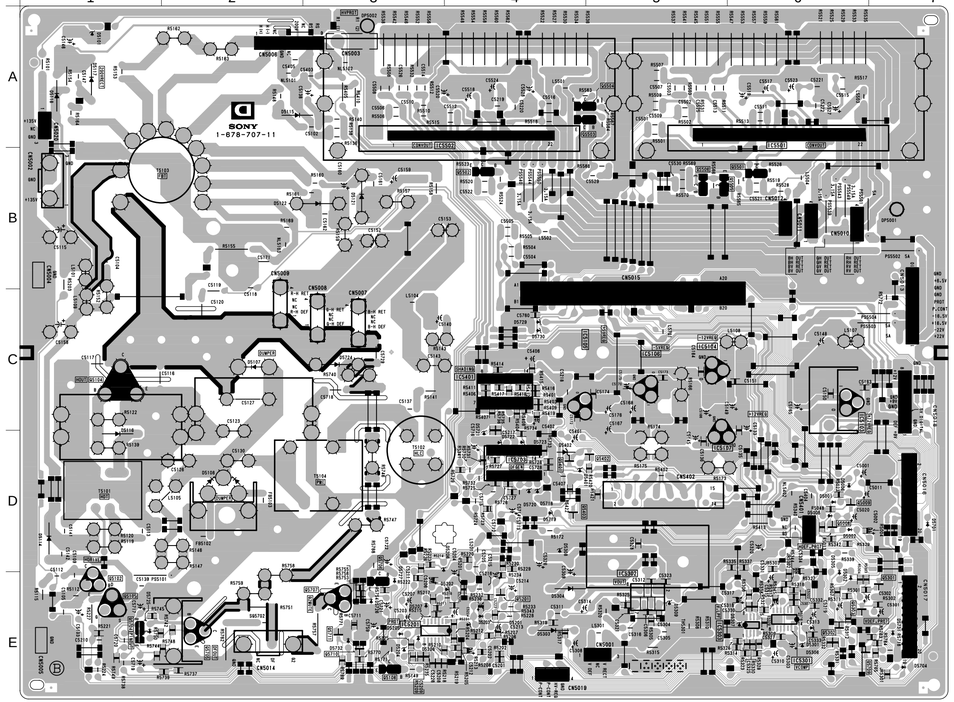
Schematic diagrams

H1 H2

← H1 H2 H3 boards

D [H/V-DEF, HV, DY DRIVE]

– D BOARD –



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

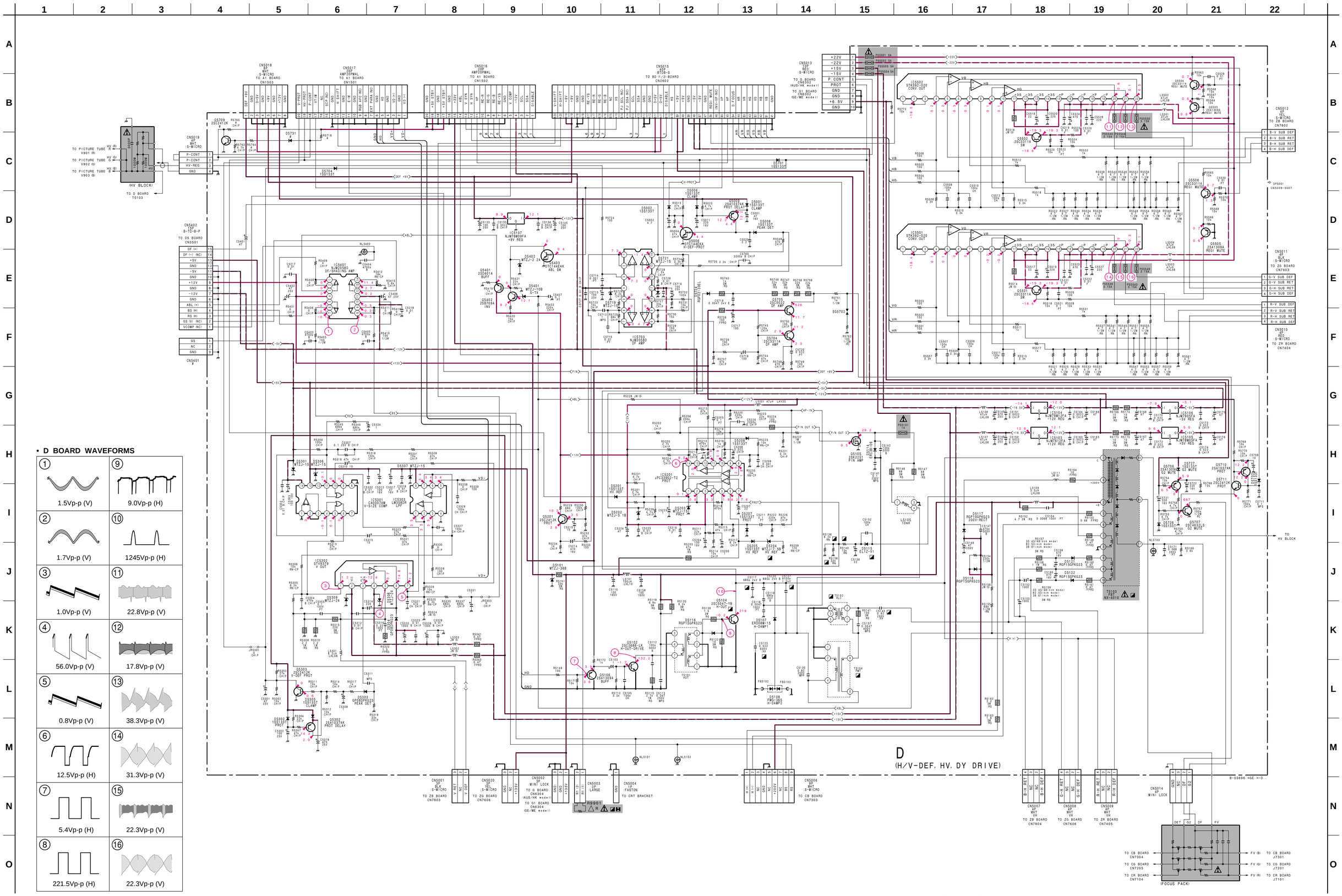
• D BOARD SEMICONDUCTOR LOCATION

IC		
IC5103	C-6	
IC5104	C-5	
IC5105	C-4	
IC5106	C-5	
IC5107	D-5	
IC5201	E-3	
IC5301	E-6	
IC5302	E-5	
IC5303	E-6	
IC5401	C-4	
IC5501	A-6	
IC5502	A-5	
IC5703	D-4	

TRANSISTOR		
	✻	
Q5006	D-6	①
Q5009	D-6	①
Q5102	E-1	–
Q5104	C-1	–
Q5105	E-1	–
Q5106	E-3	–
Q5201	E-4	⑤
Q5302	E-6	①
Q5303	E-6	③
Q5401	D-4	⑤
Q5402	D-5	⑤
Q5403	D-4	⑤
Q5501	B-6	–
Q5502	B-4	–
Q5503	A-5	–
Q5504	A-5	–
Q5505	B-5	–
Q5506	B-5	–
Q5704	E-1	–
Q5705	E-2	–
Q5706	E-3	–
Q5707	E-3	–
Q5710	E-3	⑤
Q5711	E-3	⑤

DIODE		
	✻	
D5001	D-6	–
D5002	D-6	–
D5006	D-6	–
D5008	D-6	–
D5101	A-1	–
D5107	C-2	–
D5108	D-2	–
D5114	D-1	–
D5115	A-2	–
D5116	D-1	–
D5117	A-1	–
D5118	A-1	–
D5121	B-3	–
D5122	B-3	–
D5201	E-4	–
D5202	E-4	–
D5203	E-4	–
D5204	E-3	–
D5205	E-3	–
D5207	E-3	–
D5208	E-3	–
D5301	E-6	–
D5302	E-6	–
D5303	E-4	–
D5304	E-4	–
D5305	E-6	–
D5306	E-6	–
D5307	E-6	–
D5308	D-4	–
D5309	E-5	–
D5401	D-4	–
D5402	D-4	–
D5701	D-7	–
D5704	E-7	–
D5719	D-4	–
D5721	D-4	–
D5724	C-3	–
D5726	E-3	–
D5727	E-3	–
D5732	E-3	–

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)



• D BOARD WAVEFORMS

① 1.5Vp-p (V)	⑨ 9.0Vp-p (H)
② 1.7Vp-p (V)	⑩ 1245Vp-p (H)
③ 1.0Vp-p (V)	⑪ 22.8Vp-p (V)
④ 56.0Vp-p (V)	⑫ 17.8Vp-p (V)
⑤ 0.8Vp-p (V)	⑬ 38.3Vp-p (V)
⑥ 12.5Vp-p (H)	⑭ 31.3Vp-p (V)
⑦ 5.4Vp-p (H)	⑮ 22.3Vp-p (V)
⑧ 221.5Vp-p (H)	⑯ 22.3Vp-p (V)

Schematic diagram
← D board

Schematic diagram
BD (1/2) board →

(15) Schematic Diagram of BD (1/2) Board

BD (1/2)

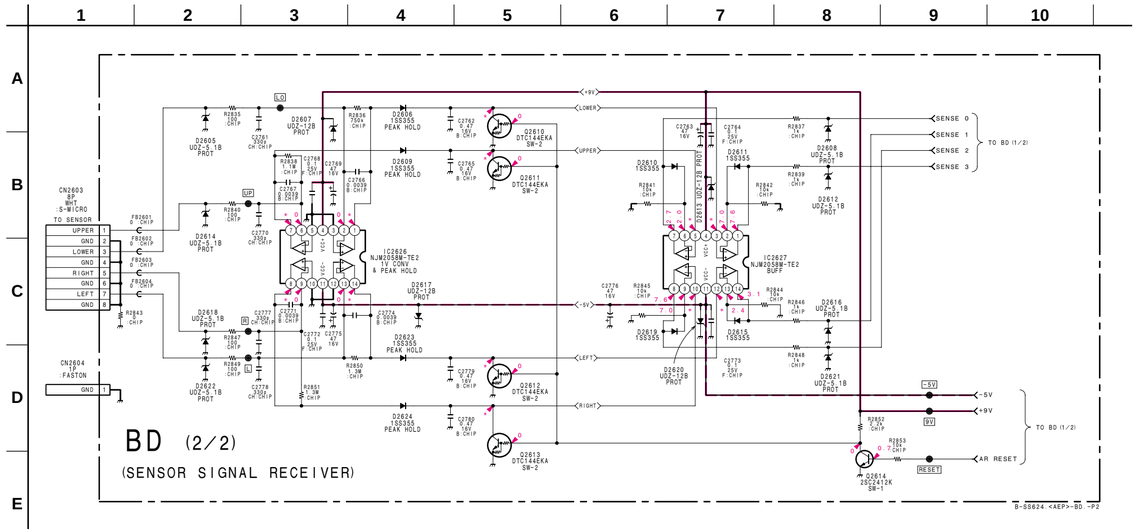
(PJED, REGI CORRECTION)

B-5S624-<AEP>-BD-P1

• **BD (1/2) BOARD WAVEFORMS**

① 6.0Vp-p (8MHz)	② 5.1Vp-p (500kHz)	③ 4.6Vp-p (V)	④ 4.8Vp-p (H)
⑤ 4.9Vp-p (V)	⑥ 5.5Vp-p (16MHz)	⑦ 5.1Vp-p (H)	⑧ 4.5Vp-p (V)
⑨ 3.5Vp-p (12MHz)	⑩ 6.6Vp-p (32MHz)	⑪ 1.3Vp-p (V)	⑫ 0.9Vp-p (V)
⑬ 1.0Vp-p (V)	⑭ 2.1Vp-p (V)	⑮ 1.4Vp-p (V)	⑯ 1.9Vp-p (V)

(16) Schematic Diagram of BD (2/2) Board



• **BD BOARD SEMICONDUCTOR LOCATION**

IC

	(Component Side)	(Conductor Side)
IC2601	B-1	
IC2602	A-1	B-1
IC2603	B-1	
IC2604	A-2	B-2
IC2605	A-4	
IC2606	A-3	
IC2607	B-3	
IC2608	B-1	
IC2609	A-2	B-2
IC2610	B-2	
IC2611	B-3	
IC2612	A-3	
IC2613	A-3	
IC2614	A-1	B-1
IC2615	A-3	
IC2616	B-1	
IC2617	B-4	
IC2618	B-3	
IC2619	B-3	
IC2620	B-4	
IC2621	A-4	
IC2622	B-1	
IC2623	A-1	B-2
IC2625	A-1	B-2
IC2626	B-1	
IC2627	B-1	

TRANSISTOR

	(Component Side)	(Conductor Side) ✻
Q2601	A-3	②
Q2602	B-4	②
Q2603	A-4	②
Q2604	B-4	②
Q2605	B-4	②
Q2606	B-3	②
Q2607	A-4	①
Q2608	A-3	①
Q2610	B-1	①
Q2611	B-1	②
Q2612	B-1	①
Q2613	B-1	②
Q2614	B-1	②

DIODE

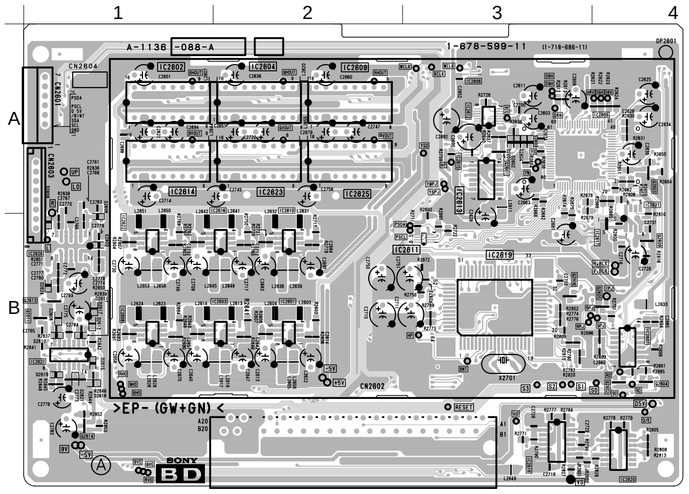
	(Component Side)	(Conductor Side) ✻
D2601	A-3	③
D2602	A-3	③
D2603	A-3	③
D2604	A-3	③
D2605	B-1	③
D2606	B-1	③
D2607	B-1	③
D2608	B-1	③
D2609	B-1	③
D2610	B-1	③
D2611	B-1	③
D2612	B-1	③
D2613	A-1	③
D2614	B-1	③
D2615	B-1	③
D2616	B-1	③
D2617	B-1	③
D2618	B-1	③
D2619	B-1	③
D2620	A-1	③
D2621	B-1	③
D2622	B-1	③
D2623	B-1	③
D2624	B-1	③

CRYSTAL

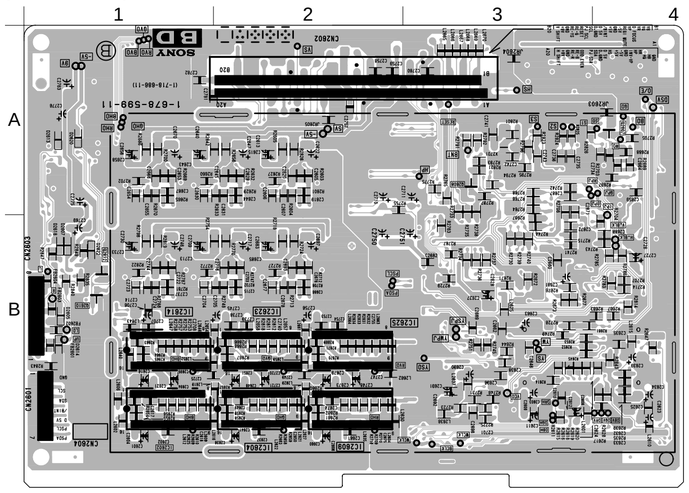
	(Component Side)	(Conductor Side)
X2701	B-3	

✻: **Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)**

– BD BOARD – (Component Side)



(Conductor Side)

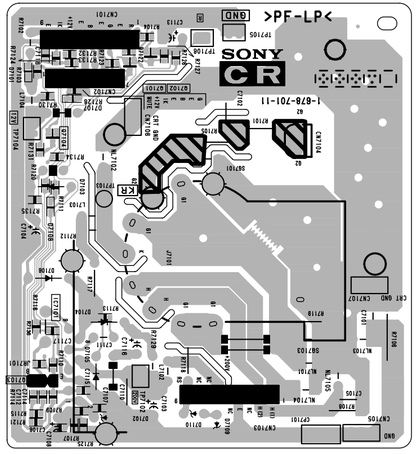


Schematic diagram

◀ BD **(1/2) board**

CR [R CRT DRIVE] ZR [DY, VM DRIVE]

– CR BOARD –

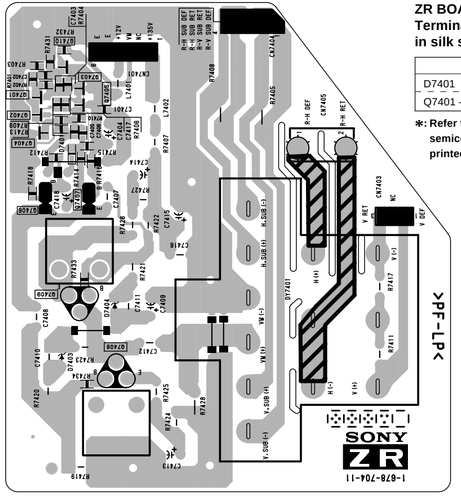


CR BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
D7108	③
Q7101, 7104	①

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

– ZR BOARD –



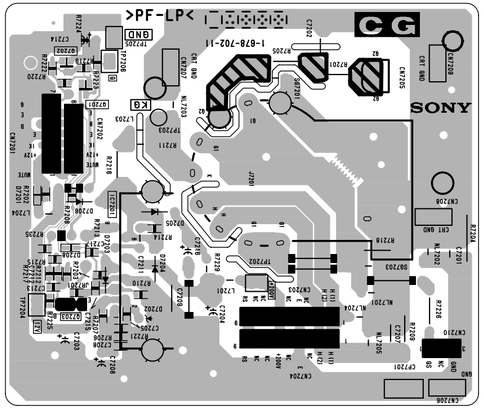
ZR BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
D7401	③
Q7401 – 7405, 7410	①

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

CG [G CRT DRIVE] ZG [DY, VM DRIVE]

– CG BOARD –



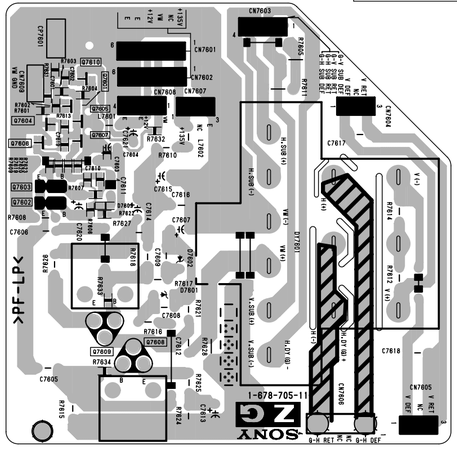
CG BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
D7208	③
Q7201, 7202	①

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

– ZG BOARD –



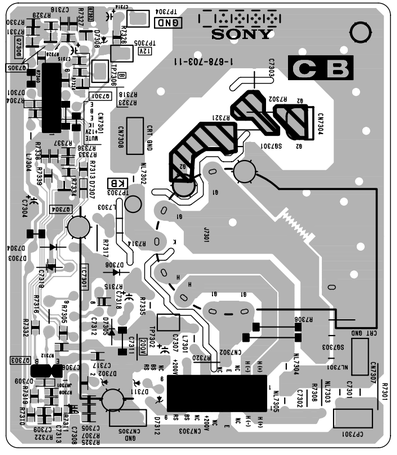
ZG BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
D7603	③
Q7601, 7604 – 7607, Q7610	①

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

CB [B CRT DRIVE] ZB [DY, VM DRIVE]

– CB BOARD –

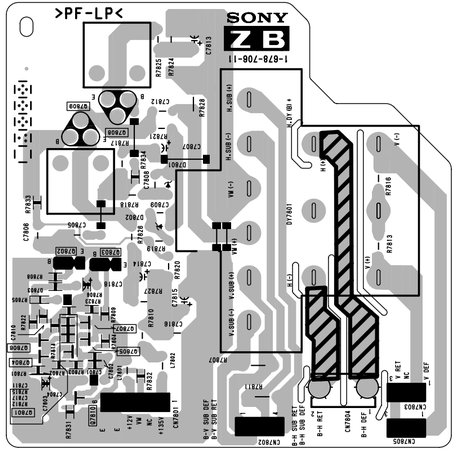


CB BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
D7307, 7309	③
Q7301, 7302, 7305, 7306	①

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

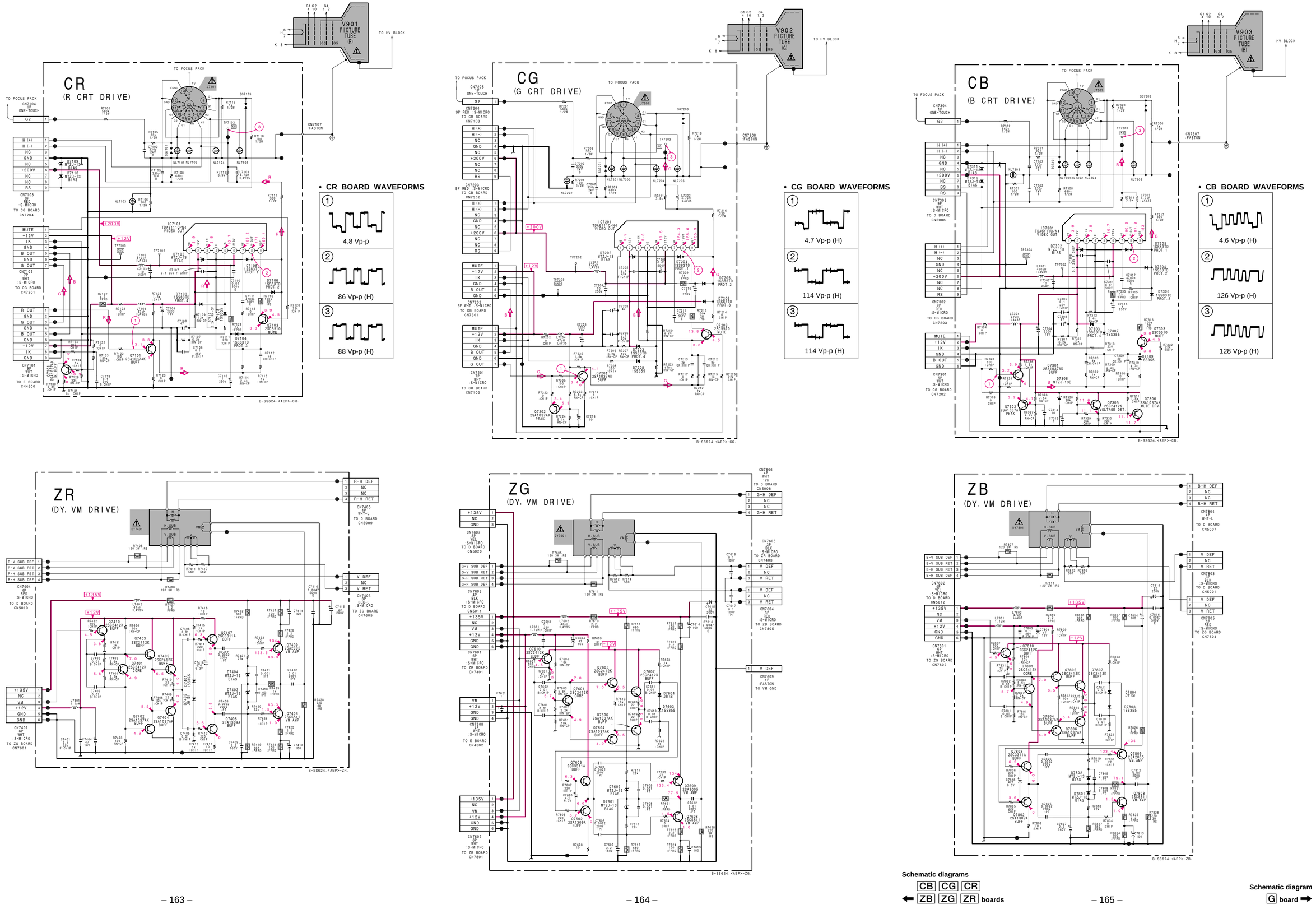
– ZB BOARD –



ZB BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
D7803	③
Q7801, 7804 – 7807, Q7810	①

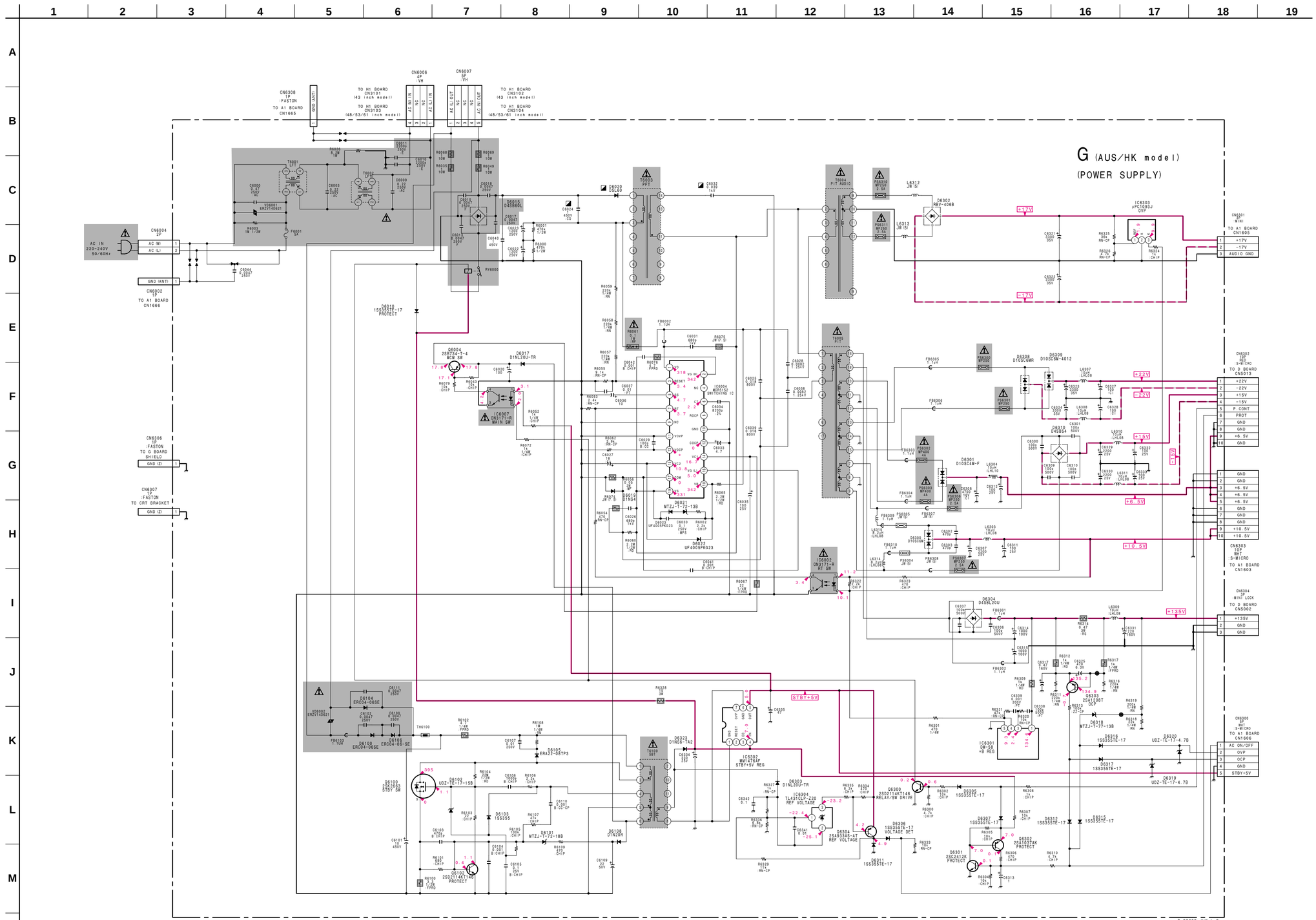
∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)


CR
(R CRT DRIVE)
V901 PICTURE TUBE (R)
TO HV BLOCK
TO FOCUS PACK
CN7104 7P ONE-TOUCH
CN7105 9P RED :S-WICRO TO CG BOARD CN7204
CN7102 7P WHT :S-WICRO TO CG BOARD CN7201
CN7101 8P WHT :S-WICRO TO E BOARD CN4500
CN7107 :FASTON
IC7101 TDA6111Q/N4 VIDEO OUT
+200V
+12V
B-SS624 <AEP>-CR
• CR BOARD WAVEFORMS
4.8 Vp-p
86 Vp-p (H)
88 Vp-p (H)
CG
(G CRT DRIVE)
V902 PICTURE TUBE (G)
CN7205 9P ONE-TOUCH
CN7204 9P RED S-WICRO TO CR BOARD CN7103
CN7203 9P RED S-WICRO TO CB BOARD CN7302
CN7201 6P WHT :S-WICRO TO CR BOARD CN7102
CN7202 6P WHT :S-WICRO TO CB BOARD CN7301
CN7208 :FASTON
IC7201 TDA6111Q/N4 VIDEO OUT
B-SS624 <AEP>-CG
• CG BOARD WAVEFORMS
4.7 Vp-p (H)
114 Vp-p (H)
114 Vp-p (H)
CB
(B CRT DRIVE)
V903 PICTURE TUBE (B)
HV BLOCK
CN7304 7P ONE-TOUCH
CN7303 9P RED :S-WICRO TO D BOARD CN5006
CN7302 8P WHT :S-WICRO TO CG BOARD CN7203
CN7301 6P WHT :S-WICRO TO CB BOARD CN7202
CN7307 :FASTON
IC7301 TDA6111Q/N4 VIDEO OUT
B-SS624 <AEP>-CB
• CB BOARD WAVEFORMS
4.6 Vp-p (H)
126 Vp-p (H)
128 Vp-p (H)
ZR
(DY, VM DRIVE)
CN7404 4P RED :S-WICRO TO D BOARD CN5010
CN7401 6P WHT :S-WICRO TO ZG BOARD CN7601
CN7405 4P WHT-L TO D BOARD CN5009
CN7403 3P BLK :S-WICRO TO ZG BOARD CN7605
B-SS624 <AEP>-ZR
ZG
(DY, VM DRIVE)
CN7607 3P YEL :S-WICRO TO D BOARD CN5020
CN7603 4P BLK :S-WICRO TO D BOARD CN5011
CN7601 6P WHT :S-WICRO TO ZR BOARD CN7401
CN7602 6P WHT :S-WICRO TO ZB BOARD CN7801
CN7606 3P WHT :S-WICRO TO D BOARD CN5008
CN7605 3P BLK :S-WICRO TO ZR BOARD CN7403
CN7604 3P RED :S-WICRO TO ZB BOARD CN7805
CN7609 :FASTON TO VM GND
B-SS624 <AEP>-ZG
ZB
(DY, VM DRIVE)
CN7802 YEL :S-WICRO TO D BOARD CN5012
CN7801 WHT :S-WICRO TO ZG BOARD CN7602
CN7804 4P WHT-L TO D BOARD CN5007
CN7803 3P BLK :S-WICRO TO D BOARD CN5001
CN7805 3P RED :S-WICRO TO ZG BOARD CN7604
B-SS624 <AEP>-ZB

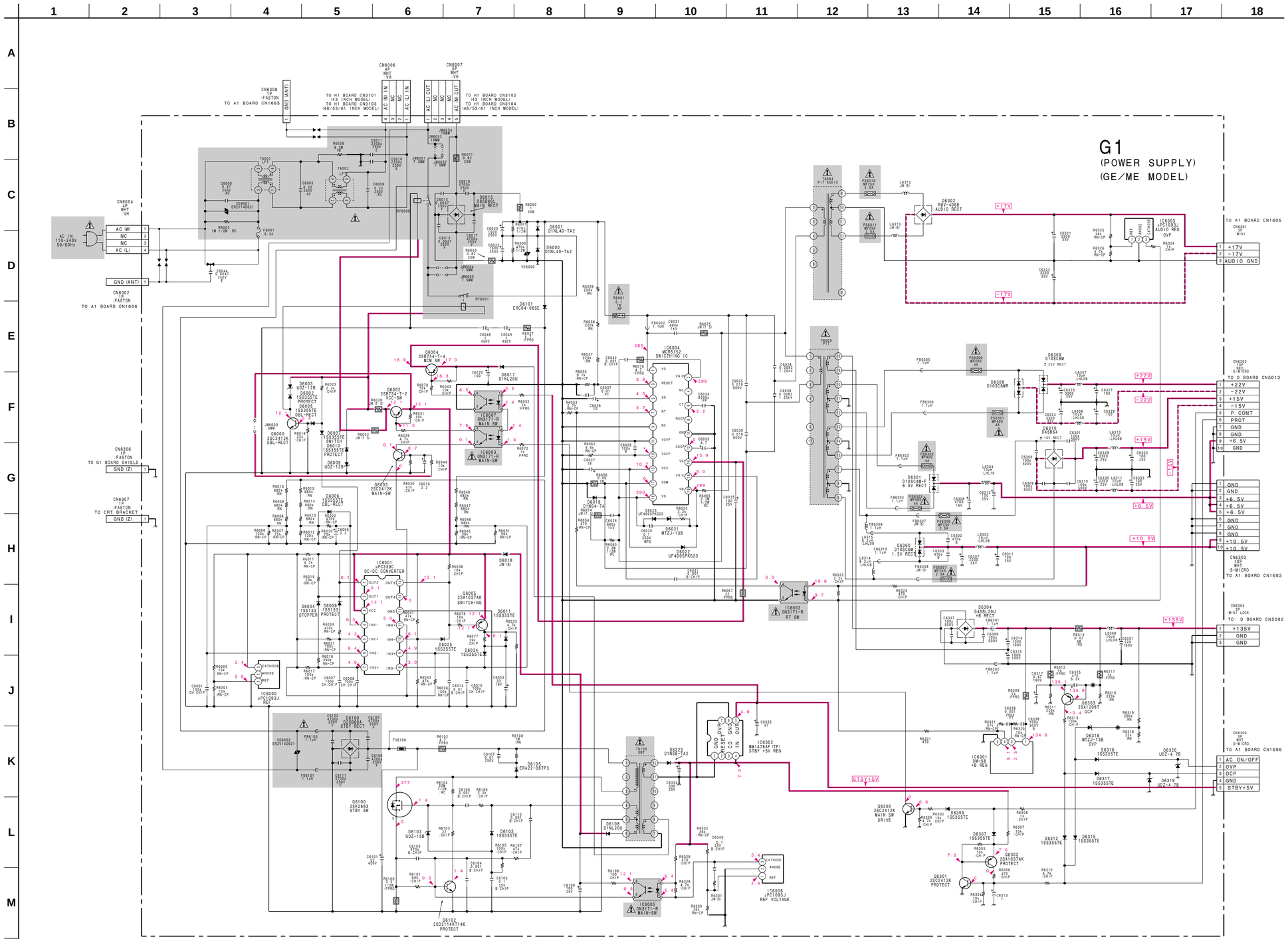
Schematic diagrams
CB CG CR
ZB ZG ZR boards

Schematic diagram
G board

(18) Schematic Diagram of G Board (AUS/HK)



(19) Schematic Diagram of G1 Board (GE/ME)



Schematic diagram

← G1 board

G [POWER SUPPLY] (AUS/HK)

G1 [POWER SUPPLY] (GE/ME)

• G BOARD SEMICONDUCTOR LOCATION

IC		
IC6002	B-3	
IC6004	A-4	
IC6007	C-3	
IC6301	A-2	
IC6302	D-3	
IC6303	A-1	
IC6304	D-2	

TRANSISTOR		
		✻
Q6004	C-4	–
Q6100	D-4	–
Q6102	C-4	①
Q6300	D-2	①
Q6301	D-1	①
Q6302	D-1	①
Q6303	A-1	–
Q6304	D-2	–

DIODE		
		✻
D6010	D-3	③
D6015	C-4	–
D6017	D-4	–
D6019	A-5	–
D6020	B-5	–
D6021	A-5	–
D6022	A-5	–
D6023	A-5	–
D6100	E-1	–
D6101	D-4	–
D6102	D-4	③
D6103	D-4	–
D6104	E-4	–
D6105	D-4	–
D6106	E-4	–
D6108	D-4	–
D6300	C-2	–
D6301	C-2	–
D6302	A-2	–
D6303	D-2	–
D6304	B-2	–
D6305	D-2	③
D6306	D-2	③
D6307	D-1	③
D6308	C-2	–
D6309	C-2	–
D6310	C-3	–
D6311	D-2	③
D6312	D-1	③
D6315	D-1	③
D6316	D-1	③
D6317	D-1	③
D6318	A-1	–
D6319	D-1	③
D6320	D-1	③
D6323	D-3	–

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

• G1 BOARD SEMICONDUCTOR LOCATION

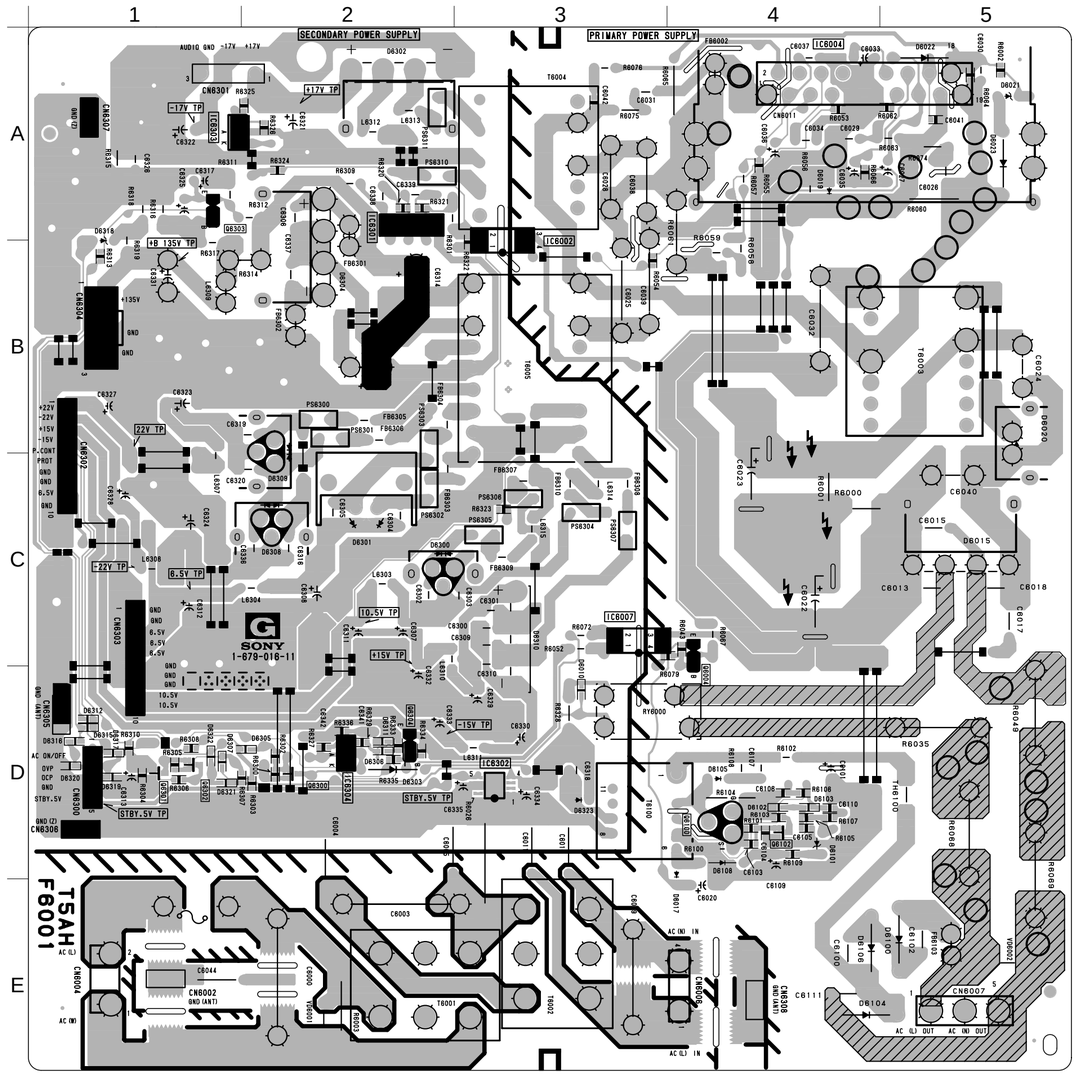
IC		
IC6000	D-4	
IC6001	D-4	
IC6002	B-3	
IC6003	C-3	
IC6004	A-4	
IC6005	D-3	
IC6006	D-2	
IC6007	C-3	
IC6301	A-2	
IC6302	D-2	
IC6303	A-1	

TRANSISTOR		
		✻
Q6000	D-4	①
Q6002	D-4	–
Q6003	D-4	①
Q6004	D-3	–
Q6005	D-5	–
Q6100	D-3	–
Q6102	E-3	①
Q6300	D-2	①
Q6301	D-1	①
Q6302	D-1	①
Q6303	A-1	–

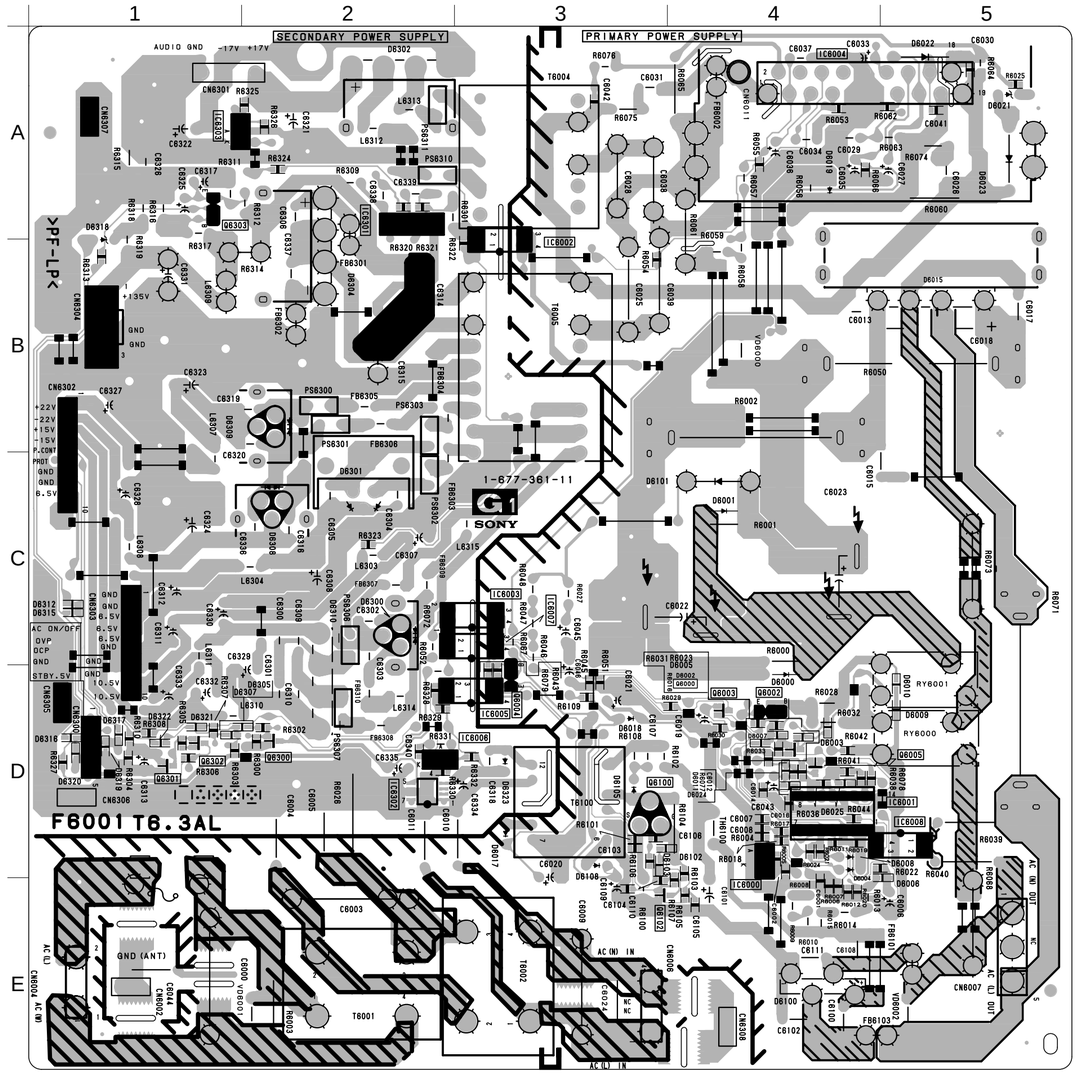
DIODE		
		✻
D6000	D-4	–
D6001	C-4	–
D6002	D-4	③
D6003	D-4	③
D6004	D-4	–
D6005	D-4	③
D6006	D-5	③
D6007	D-4	③
D6008	D-4	–
D6009	D-5	③
D6010	D-5	③
D6011	D-4	③
D6015	B-5	–
D6017	D-3	–
D6019	A-4	–
D6021	A-5	–
D6022	A-5	–
D6023	A-5	–
D6024	D-4	③
D6025	D-4	③
D6100	E-4	–
D6101	C-4	–
D6102	D-4	③
D6103	D-3	③
D6105	D-3	–
D6108	D-3	–
D6300	C-2	–
D6301	C-2	–
D6302	A-2	–
D6304	B-2	–
D6305	D-2	③
D6307	D-1	③
D6308	C-1	–
D6309	B-2	–
D6310	C-2	–
D6312	C-1	③
D6315	C-1	③
D6316	D-1	③
D6317	D-1	③
D6318	A-1	–
D6319	D-1	③
D6320	D-1	③
D6323	D-3	–

✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 110)

– G BOARD – (AUS/HK)

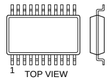


– G1 BOARD – (GE/ME)



7-5. SEMICONDUCTORS

CA0007AM
LM339NS
MC74HC74AFEL
NJM2058M-TE2
SN74HC32ANS
SN74HC32ANSR
SN74HC74ANS
SN74HC74ANSR
TLC2932IPW
TLC2932IPW-E20
TLC2933IPWR
µPC339G2-T2

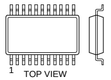


14pin SOP

CM0006CF

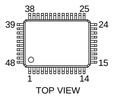
80pin QFP

CXA1875AM-T4
MC74HC4538AF
MC74HC4538AFEL
PCM56P
PCM56P-L

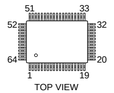


16pin SOP

CXA2123BQ-T6



CXA2069Q
CXA2100AQ-TL
CXP750096-025Q-TL
CXP86324-028Q



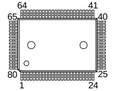
CXA3266Q-T6
CXD2064Q-T6
CXD2309Q-T6

48pin QFP

CXD2090Q

208pin QFP

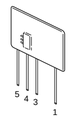
CXD2303AQ
CXD2303AQ-TL



CXD9509Q

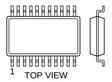
240pin QFP

DM-58



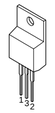
LF50CDT-TR

LM358D
LM358DR
M24C04-MN6T
M24C04-WMN6T
M24C08-MN6T(A)
M24C32-MN6T
TC7W02F
TC7W02F(TE12R)
TC7W04F
TC7W04F(TE12R)
TC7W08F
TC7W08F(TE12R)
TC7W32F
TC7W32F(TE12R)
TC7W66FU(TE12R)
TDA2822D013TR
µPC4570G2
µPC4570G2-E2

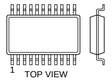


8pin SOP

LM7912CT

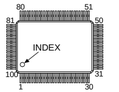


MB81F643242B-10FN

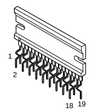


86pin SOP

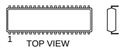
MB94918RPF-G124-BND



MCR5152

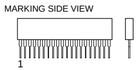


MC74HC4053AFEL



16pin DIP

MM1115XFBE



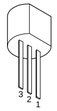
8pin SIP

MM1476AF(TP)

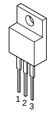
NJM2058D
µPC339C

14pin DIP

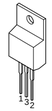
NJM78L05A
TA78L005AP-TPE6



NJM7812FA
NJM78M05FA
NJM78M09FA
NJM79M12FA
PQ09RF2

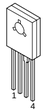


NJM79M05FA



PQ05RF11

PQ30RV21



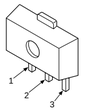
PQ5EV3

PST9120NL
PST9145NL
TC7SET04F(TE85R)
TC7SET08FU(TE85)
TC7SET08FU(TE85R)

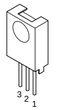
5pin CHIP

PST9143NL

S-80743AL-A7-S
S-80743AL-A7-T1



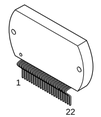
SBX3081-01



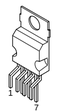
SDA5254-2B006

52pin DIP

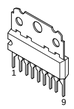
STK392-020



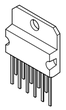
STV9379



TDA6111Q/N4



TDA7265



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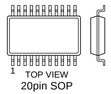

20pin SOP

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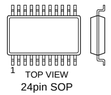

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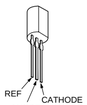
64pin QFP

TL431CLP
TL431CLP-Z20
µPC1093J-1-T



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2SA1037AK-T146-R
2SA1037K-T-146-R
2SA1162-G
2SB709A-QRS-TX
2SC1623-L5L6
2SC2412K-T-146-QR
2SC2412K-T-146-R
2SC2412K-T-146-S
2SD2114K
2SD2114KT146
2SD601A-Q
2SD601A-QRS-TX

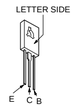
2SA1175-HFE
2SA1309A-QRSTA
2SA933AS-QT
2SA933AS-RT
2SC3311A-QRSTA

2SA1208
2SA1208-T
2SC2551-O
2SC2551O-TPE2

2SA2005
2SC5022-02
2SC5511

2SB733-34
2SB734-34
2SB734-T-2
2SB734-T-4

2SC2688-LK



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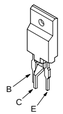

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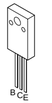

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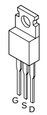
2SK2251-01-F19



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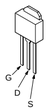

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DA204K
DA204K-T-146

DTZ-TT11-15B
DTZ24B
DTZ4.7C
DTZ5.1B
DTZ9.1
MA111-(K8).SO
MA111-TX
MA113-(TX)
RD12SB2
UDZ-TE-17-12B
UDZ-TE-17-15B
UDZ-TE-17-2.4B
UDZ-TE-17-24B
UDZ-TE-17-3.9B
UDZ-TE-17-4.7B
UDZ-TE-17-5.1B
UDZ-TE-17-6.2B
UDZ-TE-17-6.8B
UDZ-TE-17-8.2B
UDZ-TE-17-9.1B
1SS355TE-17

D1NL20U-TR
D1NS6
D1NS6-TA2
EGP20G
EL1Z
EL1Z-V1
ERA22-08
ERA22-08TP3
GP08D
GP08DL-6563
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RGP02-20EL-6394
RGP10GPKG23
RGP15GPKG23
UF4005PKG23
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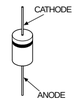
1SS83TD



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D1NL40-TA2
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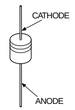
MTZJ-13B
MTZJ-7.5B
MTZJ-T-72-13B
MTZJ-T-77-10B
MTZJ-T-77-13
MTZJ-T-77-13B
MTZJ-T-77-15
MTZJ-T-77-2.2A
MTZJ-T-77-24
MTZJ-T-77-36B
MTZJ-T-77-5.1B
MTZJ-T-77-7.5B
RD10ESB2
RD13ES-B2
RD5.1ESB2
1SS133T-77



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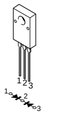
D10SC6M-4012



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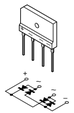
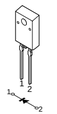
D4SB60L
D4SBL20U
D4SBS4
D4SBS4-F
D6SB60L
RBA-406B
RBV-406B

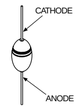


D5L60

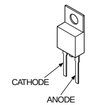


ERC04-06SE
MTZJ-T-72-18B

ERC38-06



ERD08M-15



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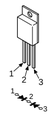

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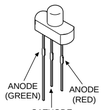
MA8039

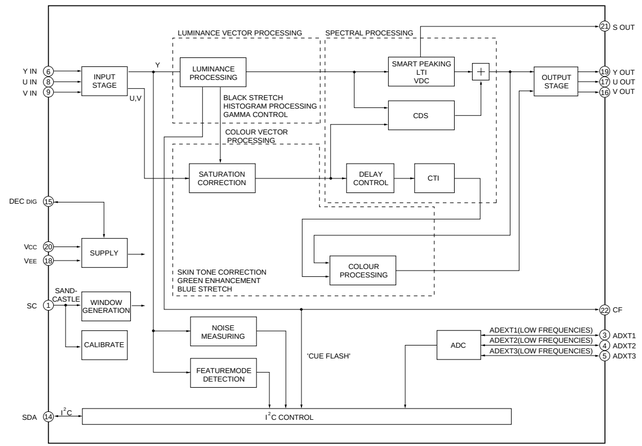
ON3171-R

SPR-325MVW

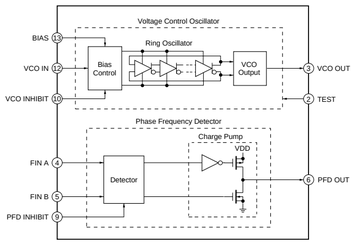


7-6. IC BLOCK DIAGRAMS

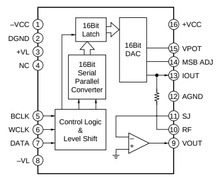
- **J1 (2/2) BOARD IC8601**
  TDA9178T



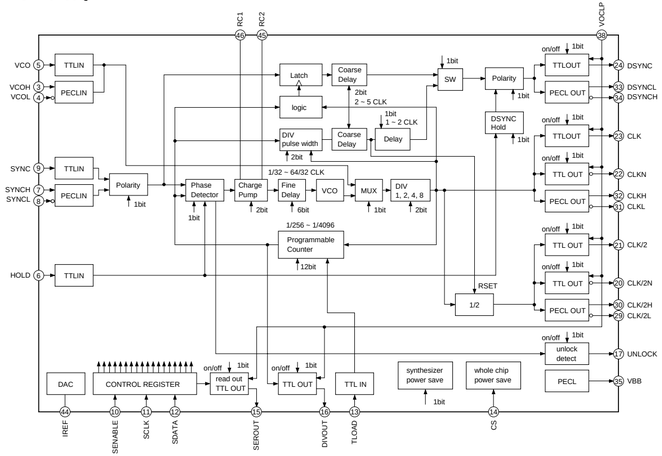
- **B3 (1/5) BOARD IC504**
  TLC2933IPWR



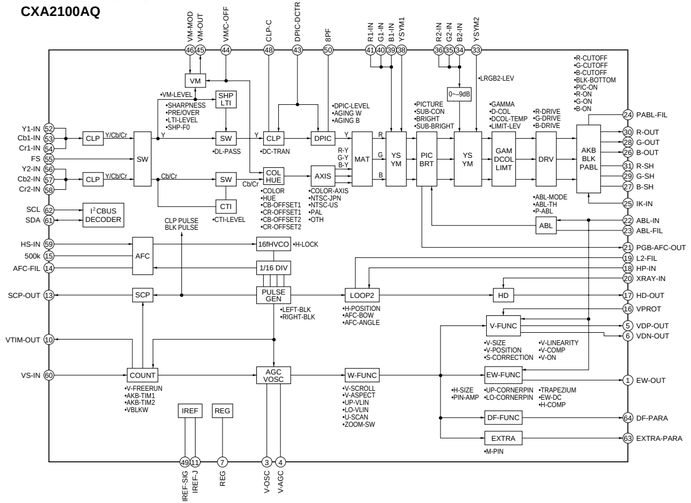
- **BD (1/2) BOARD IC2602, 2604, 2609, 2614, 2623, 2625**
  PCM56P



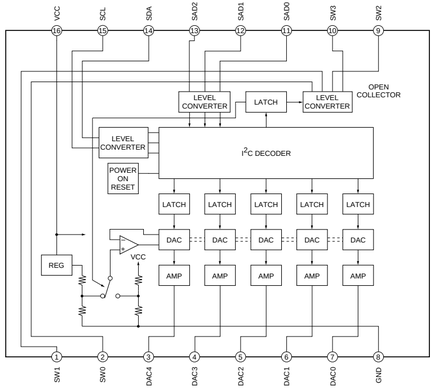
- **B3 (5/5) BOARD IC303**
  CXA3266Q



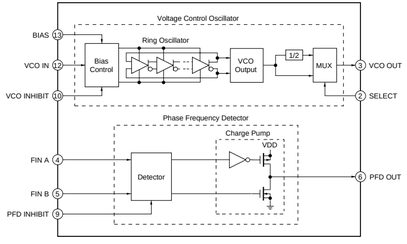
- **E BOARD IC4301**
  CXA2100AQ



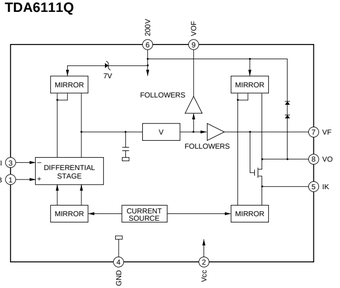
- **B3 (2/5) BOARD IC604**
  CXA1875AM



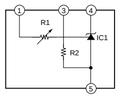
- **B3 (2/5) BOARD IC603**
- **BD (1/2) BOARD IC2612**
  TLC2932IPW



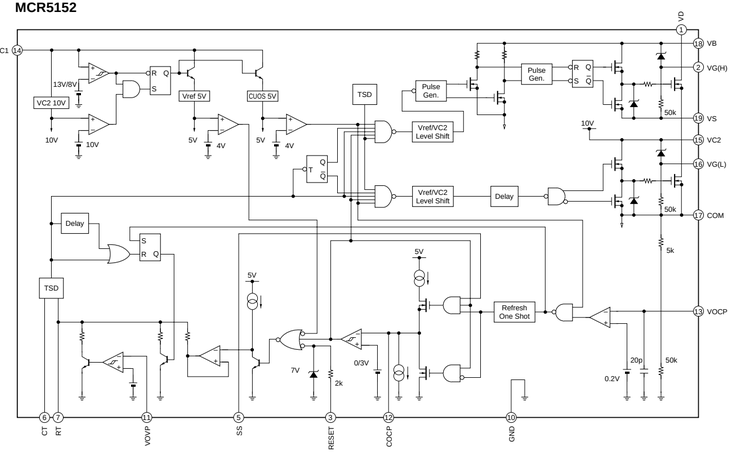
- **CR BOARD IC7101**
- **CG BOARD IC7201**
- **CB BOARD IC7301**
  TDA6111Q



- **G, G1 BOARD IC6301**
  DM-58



- **G, G1 BOARD IC6004**
  MCR5152



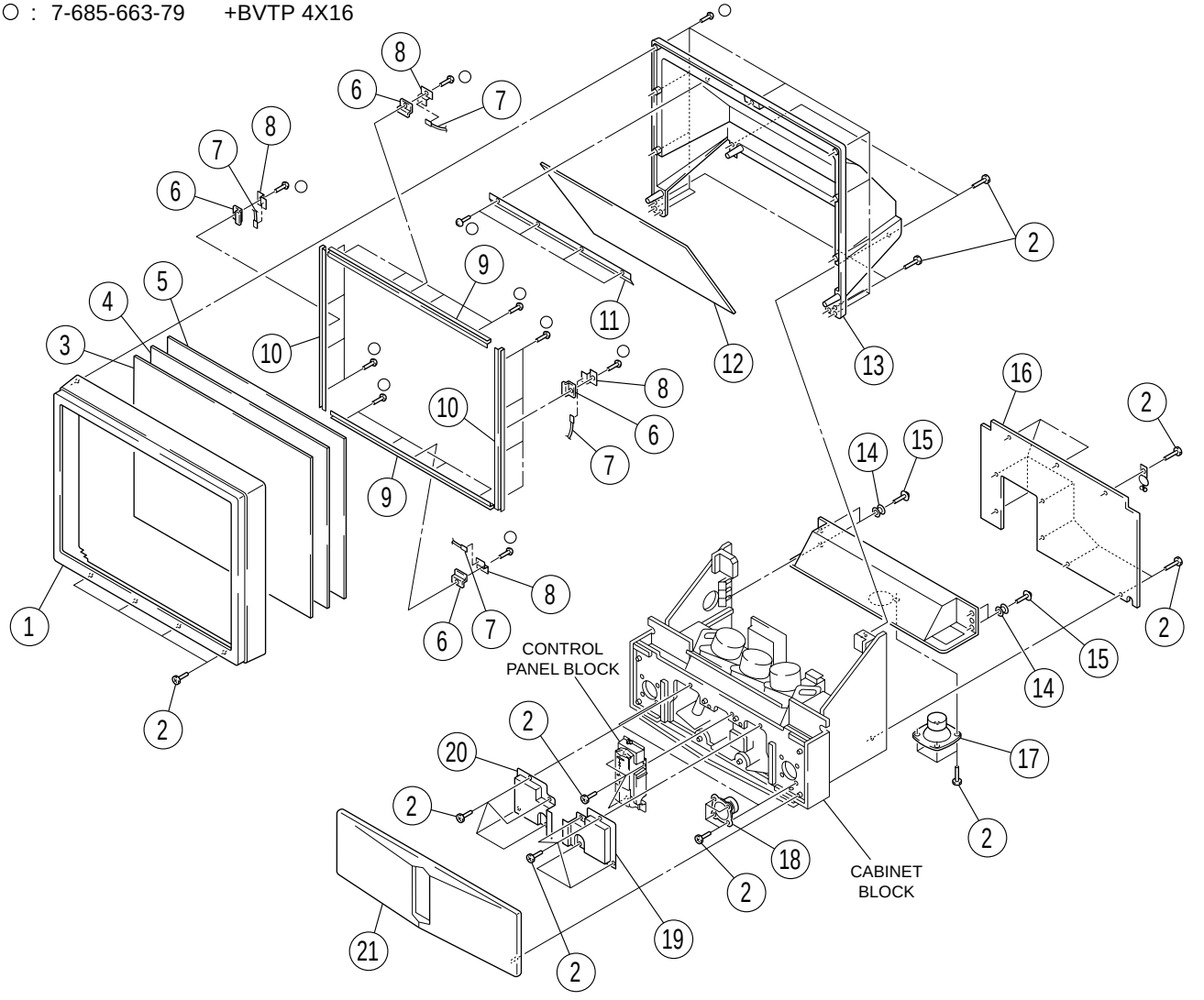
SECTION 8
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

8-1. SCREEN AND COVER BLOCK (KP-ES43)

○ : 7-685-663-79 +BVTP 4X16

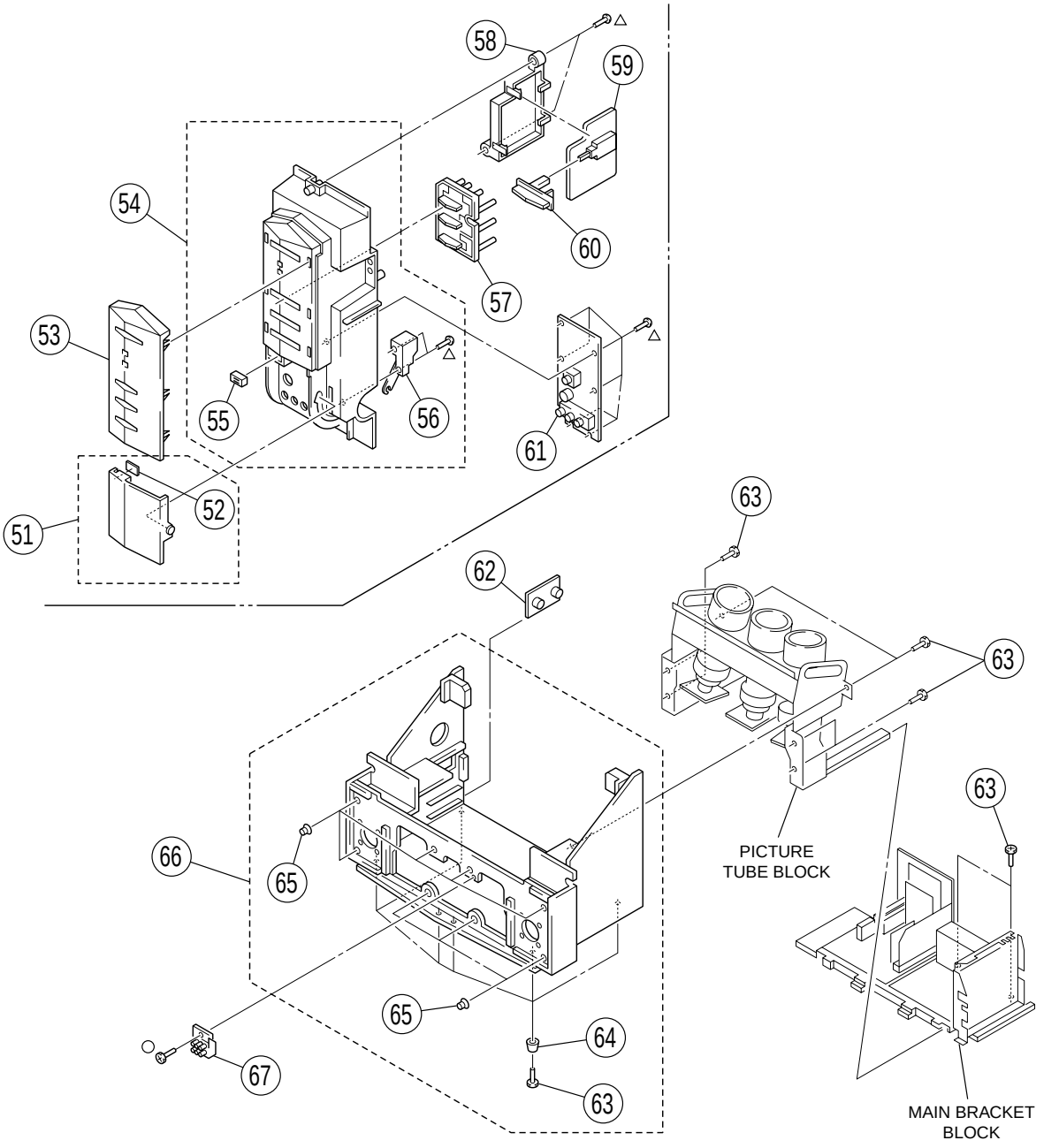


REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4037-770-1	BEZEL (43) ASSY	
2	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
3	4-076-507-11	SCREEN (43AR), CONTRAST	
4	4-075-439-11	PLATE (43L), DIFFUSION	
5	4-070-285-11	PLATE (43F), DIFFUSION	
6	* 4-205-155-01	COVER, SENSOR	
7	1-528-864-11	BATTERY, SOLAR	
8	* 4-066-132-01	HOLDER, SENSOR	
9	* 4-076-698-21	HOLDER, SCREEN	
10	* 4-076-698-31	HOLDER, SCREEN	
11	* 4-066-129-01	HOLDER, MIRROR	
12	4-076-587-01	MIRROR (43)	
13	* 4-076-588-01	COVER (43), MIRROR	
14	4-077-433-01	BUSHING, RUBBER	
15	4-058-870-01	SCREW, (4X16) W (+) P TAPPING	
16	* 4-076-578-01	BOARD (43), REAR	
17	1-529-792-11	SPEAKER (12 CM)	
18	1-529-791-11	SPEAKER (10 CM)	
19	* 4-075-384-01	COVER (R), FRONT	
20	* 4-075-385-01	COVER (L), FRONT	
21	X-4037-767-1	GRILLE ASSY, SPEAKER	

8-2. CONTROL PANEL AND CABINET BLOCK (KP-ES43)

△ : 7-685-648-79 +BVTP 3X12
○ : 7-685-663-79 +BVTP 4X16

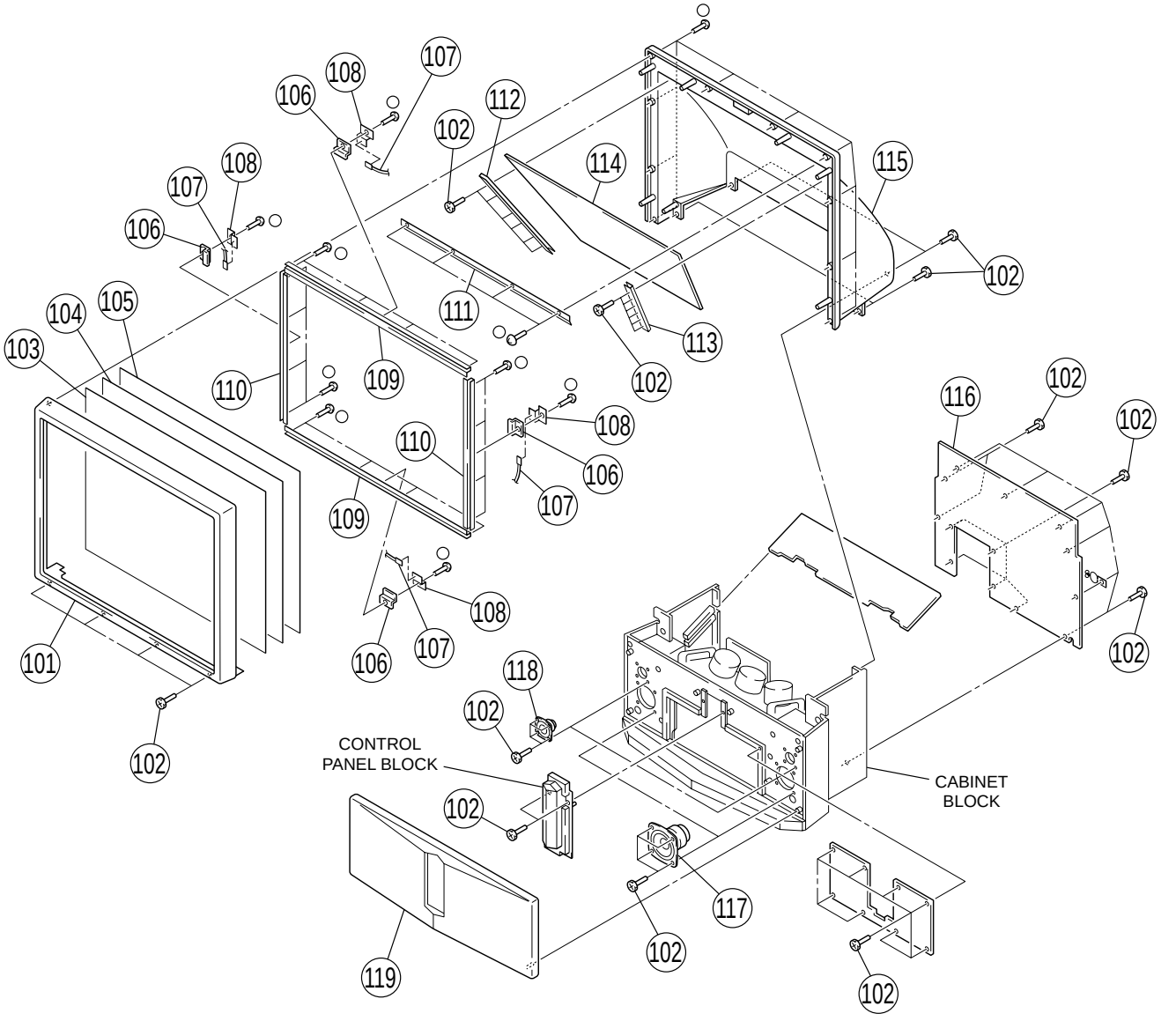
The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.



REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4037-769-1	DOOR ASSY	52
52	4-076-581-01	PLATE, CATCHER	
53	4-075-390-01	PANEL (F)	
54	X-4037-768-1	PANEL ASSY, CONTROL	55, 56
55	3-736-779-01	MAGNET	
56	4-075-383-01	DAMPER UNIT	
57	4-075-391-01	BUTTON, MALTI	
58	*4-075-389-01	BRACKET, H1	
59	*A-1372-804-A	H2 BOARD, COMPLETE	
60	4-071-995-01	BUTTON, POWER	
61	*A-1372-803-A	H1 BOARD, COMPLETE	
62	*1-761-348-11	PWB, MOUNTED (NET WORK)	
63	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
64	4-076-577-01	FOOT	
65	4-063-421-02	LATCH (K)	
66	*X-4037-766-1	CABINET (43) ASSY	63-65
67	⚠1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE) (FOCUS PACK)	

8-3. SCREEN AND COVER BLOCK (KP-ES48)

○ : 7-685-663-79 +BVTP 4X16

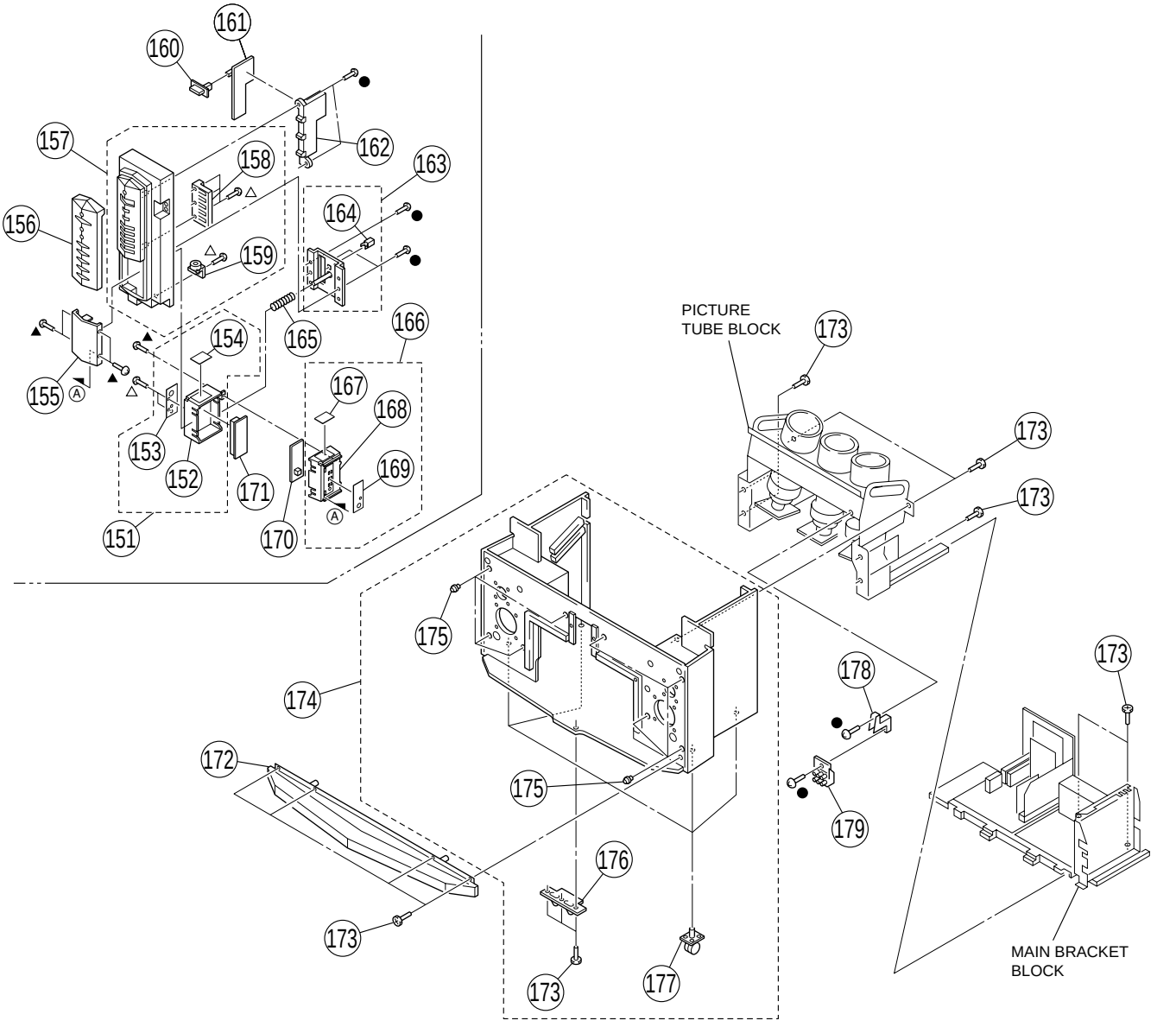


REF.NO.	PART NO.	DESCRIPTION	REMARK
101	X-4037-794-1	BEZNET (48) ASSY	
102	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
103	4-064-041-11	SCREEN (48), CONTRAST	
104	4-075-440-11	PLATE (48L), DIFFUSION	
105	4-058-455-12	PLATE (F), DIFFUSION	
106	*4-205-155-01	COVER, SENSOR	
107	1-528-864-11	BATTERY, SOLAR	
108	*4-066-132-01	HOLDER, SENSOR	
109	*4-076-698-01	HOLDER, SCREEN	
110	*4-076-698-11	HOLDER, SCREEN	
111	*4-075-234-01	HOLDER (TOP), MIRROR	
112	*4-076-705-01	HOLDER (SL), MIRROR	
113	*4-076-706-01	HOLDER (SR), MIRROR	
114	4-076-704-01	MIRROR (48)	
115	*4-076-707-01	COVER (48), MIRROR	
116	*4-076-696-01	BOARD, REAR	
117	1-529-643-11	SPEAKER (13 CM)	
118	1-529-403-11	SPEAKER (6.6 CM)	
119	X-4037-793-1	GRILLE ASSY, SPEAKER	

8-4. CONTROL PANEL AND CABINET BLOCK (KP-ES48)

▲ : 7-685-534-19 +BTP 2.6X8
△ : 7-685-648-79 +BTP 3X12
● : 7-685-663-71 +BVTP 4X16

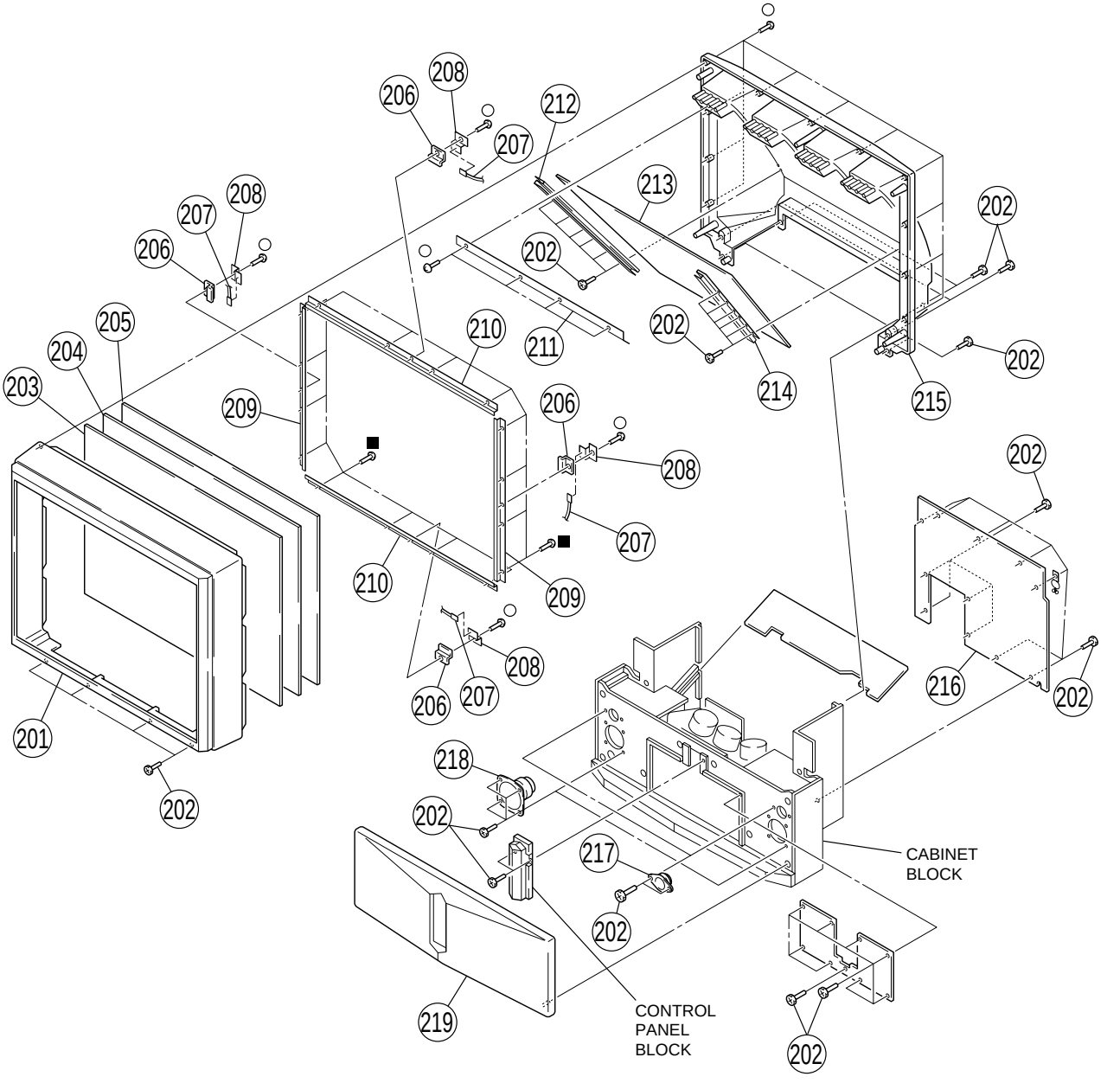
The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.



REF.NO.	PART NO.	DESCRIPTION	REMARK
151	X-4037-796-1	TRAY (L) ASSY	152-154
152	4-072-001-03	TRAY (L)	
153	4-071-990-11	LABEL (L), CONTROL	
154	4-076-702-01	LABEL (L), TOP	
155	4-071-999-12	PANEL (T)	
156	4-072-007-21	PANEL (C)	
157	X-4037-024-6	PANEL ASSY, CONTROL	158, 159
158	4-071-997-01	BUTTON, MULTI	
159	4-919-393-01	DAMPER	
160	4-071-995-01	BUTTON, POWER	
161	* A-1372-787-A	H1 BOARD, COMPLETE	
162	* 4-071-998-01	BRACKET (HA)	
163	X-4037-221-2	HOLDER ASSY, TRAY	164
164	4-047-464-01	CATCHER, PUSH	
165	4-071-987-02	SPRING (T)	
166	X-4037-795-1	TRAY (R) ASSY	167-169
167	4-076-701-01	LABEL (R), TOP	
168	4-072-000-03	TRAY (R)	
169	4-071-989-01	LABEL (R), CONTROL	
170	* A-1372-788-A	H2 BOARD, CONTROL	
171	* A-1372-789-A	H3 BOARD, CONTROL	
172	* 4-075-256-01	SKIRT, FRONT	
173	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
174	* X-4037-792-1	CABINET (48) ASSY	173, 175-177
175	4-063-421-02	LATCH (K)	
176	4-075-874-01	FOOT, PLASTIC	
177	4-075-244-01	CASTER (30 DIA.)	
178	* 4-054-825-01	BRACKET, FOCUS PACK	
179	⚠1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE) (FOCUS PACK)	

8-5. SCREEN AND COVER BLOCK (KP-ES53)

■ : 7-685-661-79 +BVTP 4X12
○ : 7-685-663-79 +BVTP 4X16

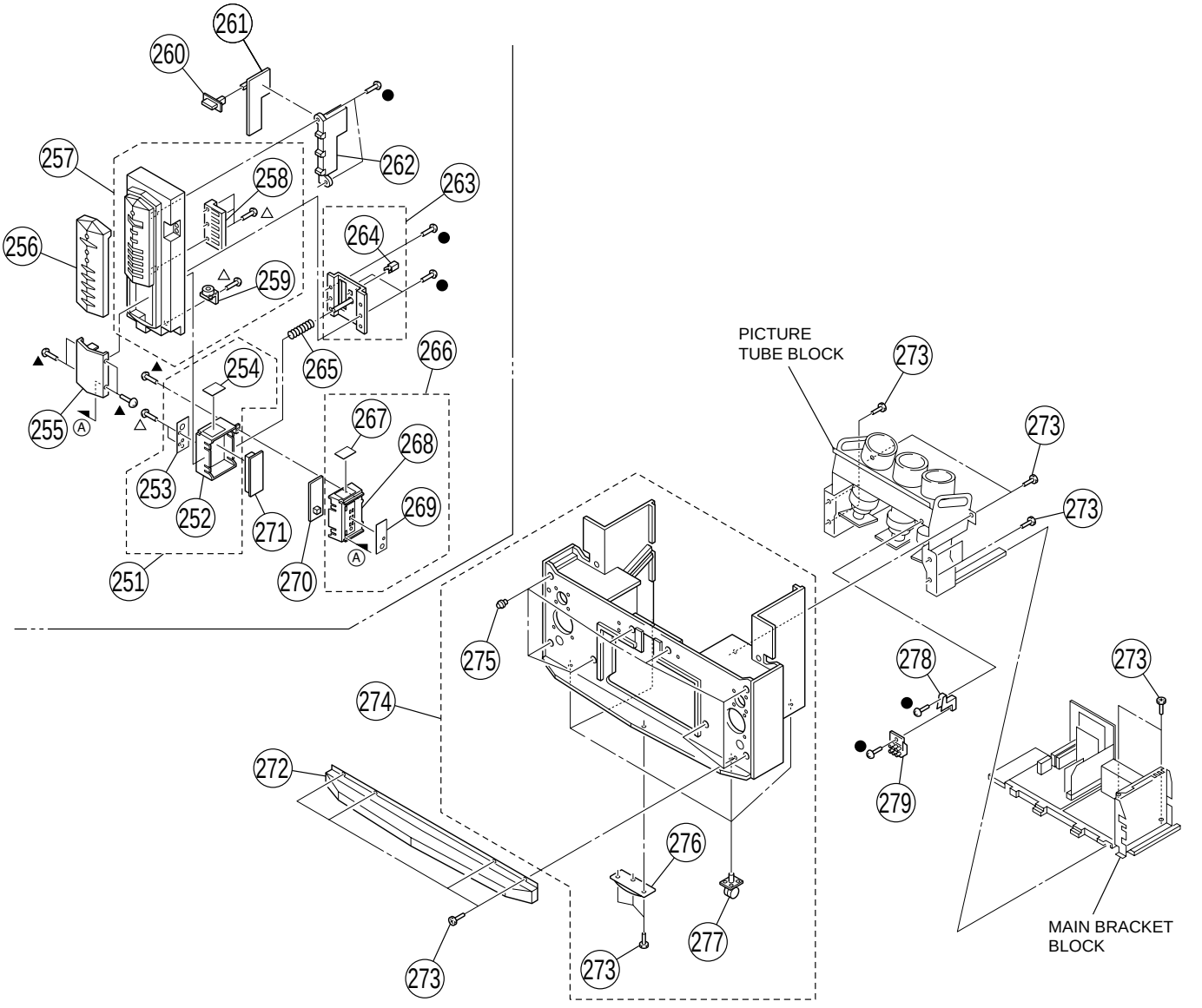


REF.NO.	PART NO.	DESCRIPTION	REMARK
201	X-4037-799-1	BEZNET (53) ASSY	
202	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
203	4-064-186-11	SCREEN (53), CONTRAST	
204	4-070-525-11	PLATE (L), DIFFUSION	
205	4-076-506-11	PLATE (53FV), DIFFUSION	
206	*4-205-155-01	COVER, SENSOR	
207	1-528-864-11	BATTERY, SOLAR	
208	*4-066-132-01	HOLDER, SENSOR	
209	*4-075-270-01	HOLDER (53) S, SCREEN	
210	*4-075-269-01	HOLDER (53) L, SCREEN	
211	*4-075-234-01	HOLDER (TOP), MIRROR	
212	*4-069-687-01	HOLDER (LS), MIRROR	
213	4-070-344-01	MIRROR, REFLECTION	
214	*4-069-688-01	HOLDER (RS), MIRROR	
215	*4-069-694-01	COVER, MIRROR	
216	*4-076-711-01	BOARD, REAR	
217	1-529-403-11	SPEAKER (6.6 CM)	
218	1-529-405-11	SPEAKER (13 CM)	
219	X-4037-798-1	GRILLE ASSY, SPEAKER	

8-6. CONTROL PANEL AND CABINET BLOCK (KP-ES53)

▲ : 7-685-534-19 +BTP 2.6X8
△ : 7-685-648-79 +BTP 3X12
● : 7-685-663-71 +BVTP 4X16

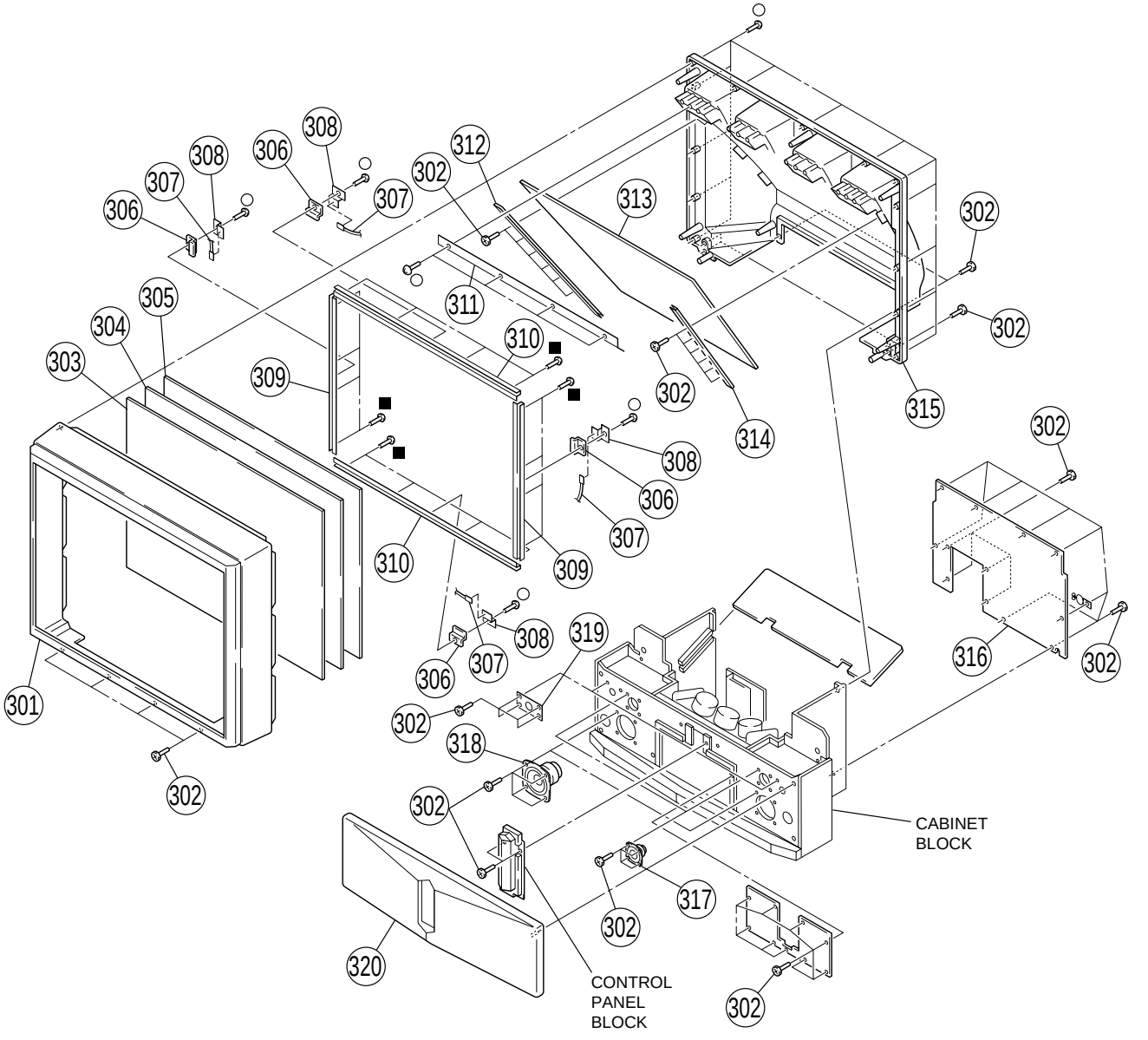
The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.



REF.NO.	PART NO.	DESCRIPTION	REMARK
251	X-4037-796-1	TRAY (L) ASSY	252-254
252	4-072-001-03	TRAY (L)	
253	4-071-990-11	LABEL (L), CONTROL	
254	4-076-702-01	LABEL (L), TOP	
255	4-071-999-12	PANEL (T)	
256	4-072-007-21	PANEL (C)	
257	X-4037-024-6	PANEL ASSY, CONTROL	258, 259
258	4-071-997-01	BUTTON, MULTI	
259	4-919-393-01	DAMPER	
260	4-071-995-01	BUTTON, POWER	
261	* A-1372-787-A	H1 BOARD, COMPLETE	
262	* 4-071-998-01	BRACKET (HA)	
263	X-4037-221-2	HOLDER ASSY, TRAY	264
264	4-047-464-01	CATCHER, PUSH	
265	4-071-987-02	SPRING (T)	
266	X-4037-795-1	TRAY (R) ASSY	267-269
267	4-076-701-01	LABEL (R), TOP	
268	4-072-000-03	TRAY (R)	
269	4-071-989-01	LABEL (R), CONTROL	
270	* A-1372-788-A	H2 BOARD, COMPLETE	
271	* A-1372-789-A	H3 BOARD, COMPLETE	
272	* 4-074-349-01	SKIRT (53), FRONT	
273	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
274	* X-4037-797-1	CABINET (53) ASSY, BOTTOM	273, 275-277
275	4-063-421-02	LATCH (K)	
276	4-075-874-01	FOOT, PLASTIC	
277	* 4-075-244-01	CASTER (DIA. 30)	
278	* 4-054-825-01	BRACKET, FOCUS PACK	
279	⚠1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE) (FOCUS PACK)	

8-7. SCREEN AND COVER BLOCK (KP-ES61)

■ : 7-685-661-79 +BVTP 4X12
○ : 7-685-663-79 +BVTP 4X16

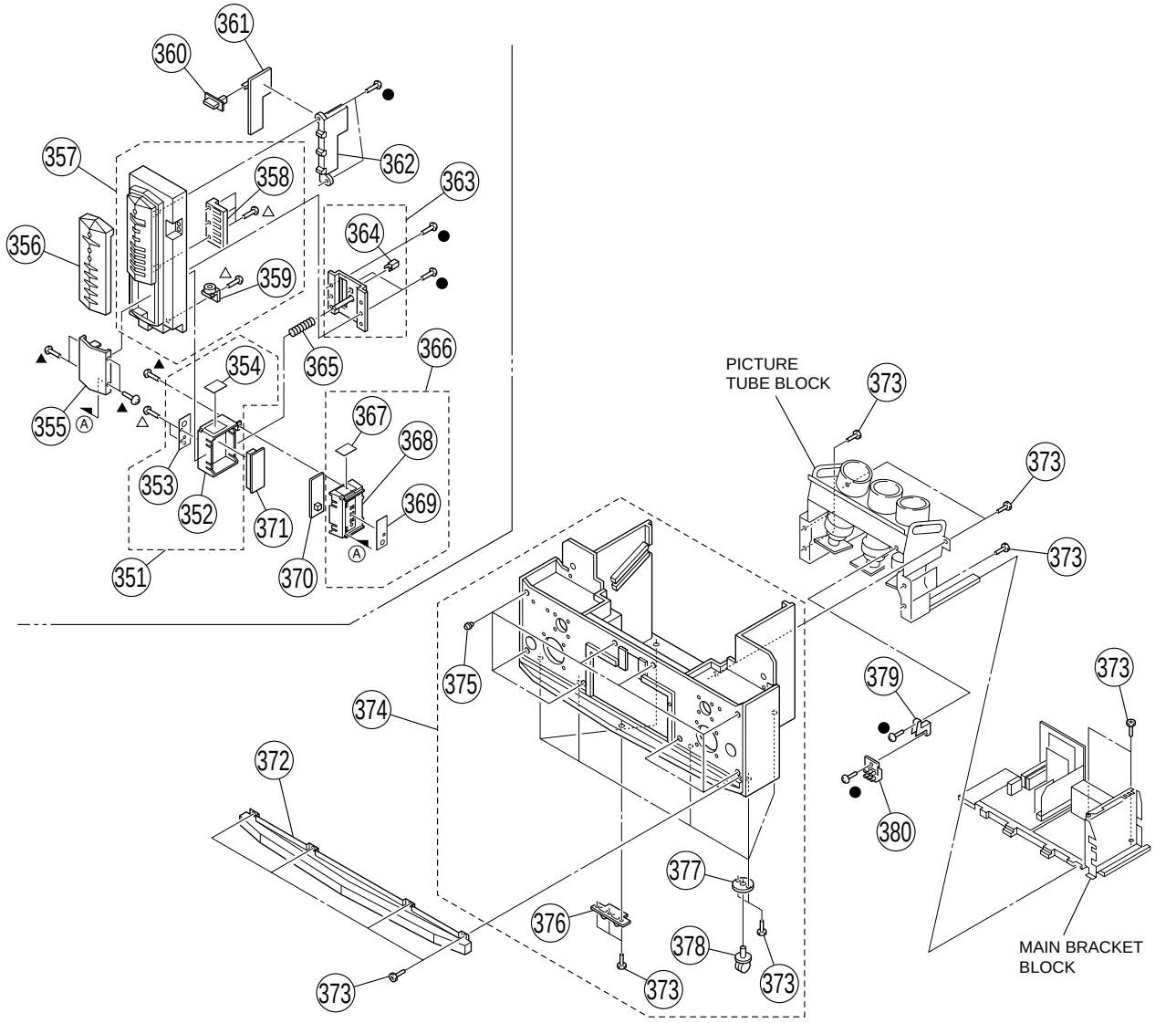


REF.NO.	PART NO.	DESCRIPTION	REMARK
301	X-4037-791-1	BEZNET (61) ASSY	
302	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
303	4-071-950-11	SCREEN (61), CONTRAST	
304	4-070-283-11	PLATE (L), DIFFUSION	
305	4-066-082-11	PLATE (F), DIFFUSION	
306	*4-205-155-01	COVER, SENSOR	
307	1-528-864-11	BATTERY, SOLAR	
308	*4-066-132-01	HOLHDER, SENSOR	
309	4-072-006-01	HOLDER (V61), SCREEN	
310	4-072-005-01	HOLDER (H61), SCREEN	
311	*4-070-345-01	HOLDER (TOP), MIRROR	
312	*4-069-689-01	HOLDER (L), MIRROR	
313	4-070-922-01	MIRROR, REFLECTION	
314	*4-069-690-01	HOLDER (R), MIRROR	
315	*4-069-695-01	COVER, MIRROR	
316	*4-076-692-01	BOARD, REAR	
317	1-529-758-11	SPEAKER (8 CM)	
318	1-529-759-11	SPEAKER (16 CM)	
319	1-529-757-11	SPEAKER (2.7 CM)	
320	X-4037-790-1	GRILLE (61) ASSY, SPEAKER	

8-8. CONTROL PANEL AND CABINET BLOCK (KP-ES61)

▲ : 7-685-534-19 +BTP 2.6X8
△ : 7-685-648-79 +BVTP 3X12
● : 7-685-663-71 +BVTP 4X16

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

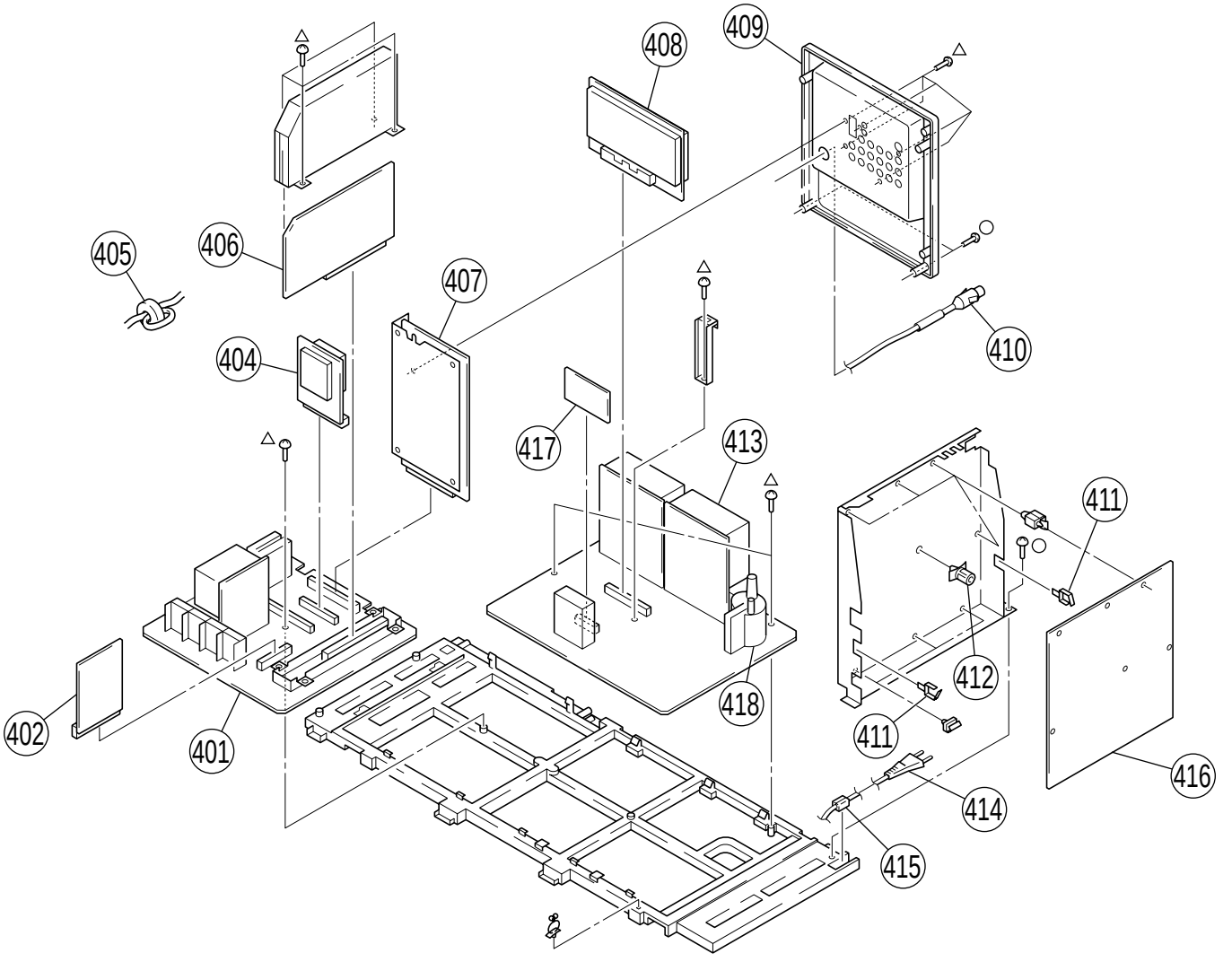


REF.NO.	PART NO.	DESCRIPTION	REMARK
351	X-4037-796-1	TRAY (L) ASSY	352-354
352	4-072-001-03	TRAY (L)	
353	4-071-990-11	LABEL (L), CONTROL	
354	4-076-702-01	LABEL (L), TOP	
355	4-071-999-12	PANEL (T)	
356	4-072-007-21	PANEL (C)	
357	X-4037-024-6	PANEL ASSY, CONTROL	358, 359
358	4-071-997-01	BUTTON, MULTI	
359	4-919-393-01	DAMPER	
360	4-071-995-01	BUTTON, POWER	
361	* A-1372-787-A	H1 BOARD, COMPLETE	
362	* 4-071-998-01	BRACKET (HA)	
363	X-4037-221-2	HOLDER ASSY, TRAY	364
364	4-047-464-01	CATCHER, PUSH	
365	4-071-987-02	SPRING (T)	
366	X-4037-795-1	TRAY (R) ASSY	367-369
367	4-076-701-01	LABEL (R), TOP	
368	4-072-000-03	TRAY (R)	
369	4-071-989-01	LABEL (R), CONTROL	
370	* A-1372-788-A	H2 BOARD, COMPLETE	
371	* A-1372-789-A	H3 BOARD, COMPLETE	
372	4-072-013-11	SKIRT (61), FRONT	
373	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
374	* X-4037-789-1	CABINET (61) ASSY	373, 375-378
375	4-063-421-02	LATCH (K)	
376	4-075-874-01	FOOT, PLASTIC	
377	4-030-850-01	SOCKET, CASTER	
378	4-039-546-01	CASTER	
379	* 4-054-825-01	BRACKET, FOCUS PACK	
380	⚠1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE)	(FOCUS PACK)

8-9. MAIN BRACKET BLOCK

△ : 7-685-648-79 +BVTP 3X12
○ : 7-685-663-79 +BVTP 4X16

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

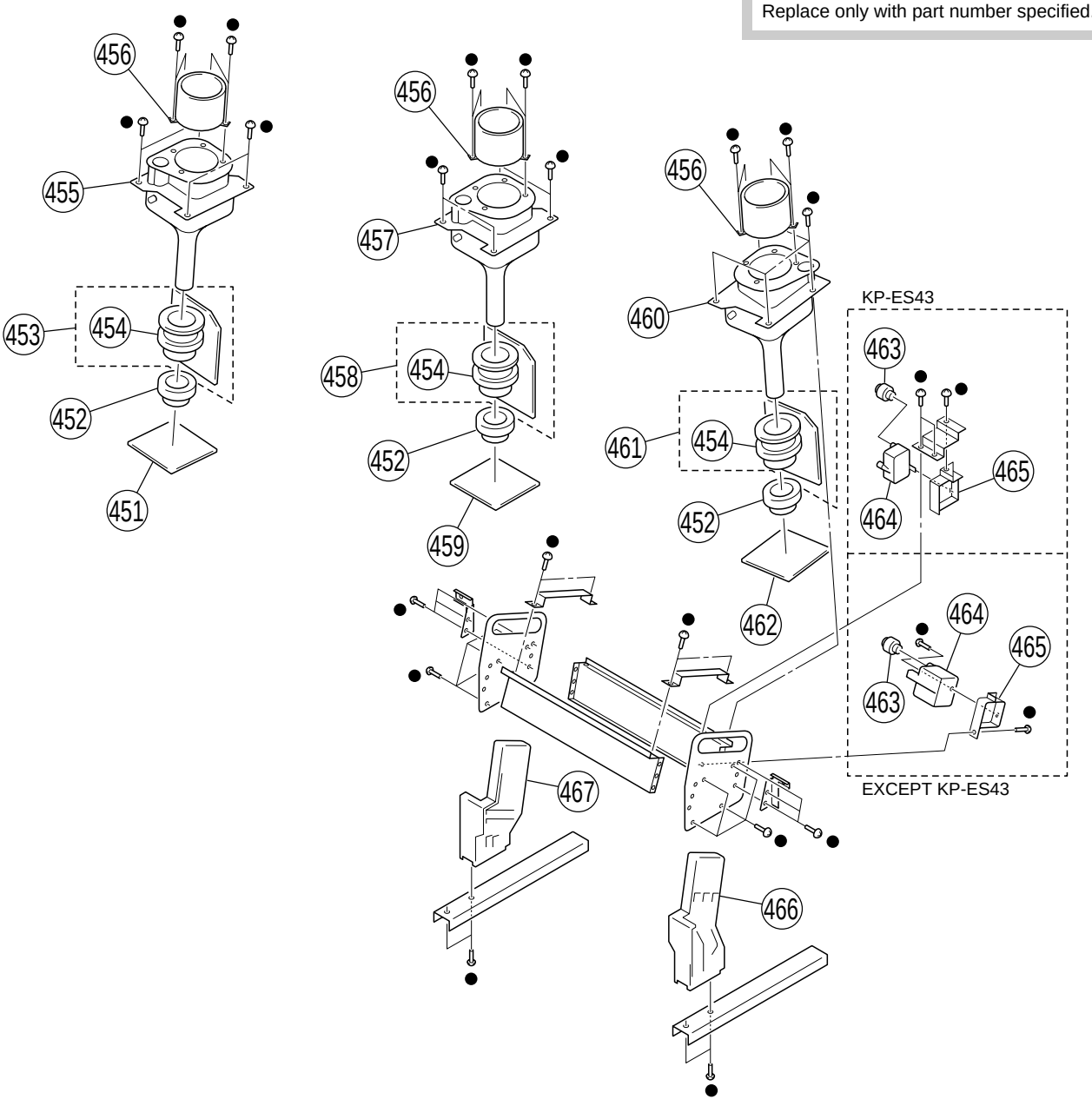


REF.NO.	PART NO.	DESCRIPTION	REMARK
401	*A-1299-176-A	A1 BOARD, COMPLETE	
402	*A-1346-922-A	E BOARD, COMPLETE	
404	*A-1306-588-A	M1 BOARD, COMPLETE	
405	1-543-982-11	CORE, FERRITE	
406	*A-1136-087-A	B3 BOARD, COMPLETE	
407	*A-1394-982-A	J1 BOARD, COMPLETE	
408	*A-1136-088-A	BD BOARD, COMPLETE	
409	4-076-679-01	TERMINAL BOARD	
410	1-790-082-11	CABLE, RF	
411	*4-316-015-00	HOLDER, WIRE	
412	*4-046-677-11	HOLDER (B), PRINTED CIRCUIT BOARD	
413	*A-1346-923-A	D BOARD, COMPLETE (ES48)	
413	*A-1346-924-A	D BOARD, COMPLETE (ES53)	
413	*A-1346-925-A	D BOARD, COMPLETE (ES61)	
413	*A-1346-937-A	D BOARD, COMPLETE (ES43)	
414	⚠1-574-062-52	CORD, POWER (WITH CONNECTOR)	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
414	⚠1-792-002-11	CORD, POWER (WITH FILTER)	(ES43HK1, ES48HK1, ES53HK1, ES61HK1)
414	⚠1-792-035-11	CORD, POWER (WITH FILTER)	(ES43SN1, ES48SN1, ES53SN1, ES61SN1)
415	4-022-115-00	HOLDER, AC CORD	
416	*A-1316-514-A	G1 BOARD, COMPLETE	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
416	*A-1316-528-A	G BOARD, COMPLETE	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
417	*A-1343-830-A	DS BOARD, COMPLETE	
418	⚠1-453-335-11	TRANSFORMER ASSY, FLYBACK	NX-4010//M

8-10. PICTURE TUBE BLOCK

● : 7-685-663-71 +BVTP 4X16

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.



REF.NO.	PART NO.	DESCRIPTION	REMARK
451	* A-1332-037-A	CR BOARD, COMPLETE	
452	⚠1-452-790-41	NECK ASSY (NA-295)	
453	* A-1391-025-A	ZR BOARD, COMPLETE	454
454	⚠1-451-476-21	DEFLECTION YOKE	
455	⚠8-733-571-15	PICTURE TUBE 07MXC2 (R) (HEATER) (ES43)	
455	⚠8-733-572-15	PICTURE TUBE 07MXC3 (R) (HEATER) (ES48, ES53)	
455	⚠8-733-573-15	PICTURE TUBE 07MXC4 (R) (HEATER) (ES61)	
456	4-040-131-21	LENS (LINNIT POINT 6) (ES61)	
456	4-056-258-11	LENS (DELTA 78) (EXCEPT ES61)	
457	⚠8-733-570-15	PICTURE TUBE 07MXC2 (G) (HEATER)	
458	* A-1391-026-A	ZG BOARD, COMPLETE	454
459	* A-1332-038-A	CG BOARD, COMPLETE	
460	⚠8-733-574-15	PICTURE TUBE 07MAC2 (B) (HEATER) (ES43)	
460	⚠8-733-575-15	PICTURE TUBE 07MAC3 (B) (HEATER) (ES48, ES53)	
460	⚠8-733-576-15	PICTURE TUBE 07MAC4 (B) (HEATER) (ES61)	
461	* A-1391-027-A	ZB BOARD, COMPLETE	454
462	* A-1332-039-A	CB BOARD, COMPLETE	
463	4-373-137-01	CAP (Z), RUBBER	
464	⚠8-598-955-12	BLOCK ASSY, HIGH-VOLTAGE	
465	* 4-066-144-02	HOLDER, HVR	
466	* 4-066-135-01	STAY (R), SIDE	
467	* 4-066-134-01	STAY (L), SIDE	

H1

SECTION 9
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  PF : µµF
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF.NO.	PART NO.	DESCRIPTION				REMARK
	* A-1372-787-A	H1 BOARD, COMPLETE (ES48, ES53, ES61)				
		**********				
	* 4-072-004-01	HOLDER, LED (D3002)				
		<CAPACITOR>				
C3101	1-126-157-11	ELECT	10µF	20%	16V	
		<CONNECTOR>				
CN3101	* 1-564-519-11	PLUG, CONNECTOR 4P				
CN3102	* 1-564-525-11	PLUG, CONNECTOR 10P				
CN3103	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				
CN3104	* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P				
		<DIODE>				
D3002	8-719-064-11	DIODE SPR-325MVW (ON/STANDBY/TIMER)				
		<IC>				
IC3101	8-742-205-30	HYB IC SBX3081-01(30)				
		<TRANSISTOR>				
Q3101	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q3102	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
		<RESISTOR>				
R3101	1-208-780-11	METAL CHIP	820	0.5%	1/10W	
R3102	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W	
R3103	1-208-793-11	METAL CHIP	3K	0.5%	1/10W	
R3104	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W	
R3105	1-216-041-00	RES-CHIP	470	5%	1/10W	
R3106	1-216-037-00	RES-CHIP	330	5%	1/10W	
R3107	1-208-806-11	METAL CHIP	10K	0.5%	1/10W	
R3108	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R3109	1-208-806-11	METAL CHIP	10K	0.5%	1/10W	
R3110	1-216-295-91	SHORT	0			
R3111	1-216-295-91	SHORT	0			
R3112	1-216-295-91	SHORT	0			
R3113	1-216-033-00	RES-CHIP	220	5%	1/10W	
R3115	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W	
		<SWITCH>				
S3101	1-692-431-21	SWITCH, TACTIL (PROG +)				
S3102	1-692-431-21	SWITCH, TACTIL (PROG –)				
S3103	1-692-431-21	SWITCH, TACTIL (VOL +)				
S3104	1-692-431-21	SWITCH, TACTIL (VOL –)				
S3105	1-692-431-21	SWITCH, TACTIL (TV/VIDEO)				
S3106	⚠1-571-433-31	SWITCH, PUSH (AC POWER) (POWER)				
		**********				
	* A-1372-803-A	H1 BOARD, COMPLETE (ES43)				
		**********				
	* 4-072-004-01	HOLDER, LED (D3101)				
		<CAPACITOR>				
C3101	1-126-157-11	ELECT	10µF	20%	16V	
		<CONNECTOR>				
CN3101	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				
CN3102	* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P				
CN3103	* 1-564-508-11	PLUG, CONNECTOR 5P				
		<DIODE>				
D3103	8-719-064-11	DIODE SPR-325MVW (ON/STANDBY/TIMER)				
		<IC>				
IC3101	8-742-205-30	HYB IC SBX3081-01(30)				

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

H1 H2

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSISTOR>			
Q3101	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3102	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R3101	1-216-295-91	SHORT	0		
R3102	1-216-037-00	RES-CHIP	330	5%	1/10W
R3103	1-216-295-91	SHORT	0		
R3104	1-216-295-91	SHORT	0		
R3105	1-216-037-00	RES-CHIP	330	5%	1/10W
R3106	1-216-295-91	SHORT	0		
R3107	1-216-041-00	RES-CHIP	470	5%	1/10W
R3108	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R3109	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
		<SWITCH>			
S3101	⚠1-571-433-31	SWITCH, PUSH (AC POWER) (POWER)			
**********					
	* A-1372-788-A	H2 BOARD, COMPLETE (ES48, ES53, ES61)			
		**********			
		<CAPACITOR>			
C3201	1-126-157-11	ELECT	10µF	20%	16V
C3202	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C3203	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C3204	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
		<CONNECTOR>			
CN3201	* 1-564-519-11	PLUG, CONNECTOR 4P			
CN3202	* 1-564-520-11	PLUG, CONNECTOR 5P			
		<DIODE>			
D3203	8-719-976-96	DIODE DTZ4.7C			
		<JACK>			
J3201	1-691-293-11	JACK (HEAD PHONE)			
		<CHIP CONDUCTOR>			
JR3206	1-216-295-91	SHORT	0		
		<COIL>			
L3201	1-414-189-31	INDUCTOR	100µH		
L3202	1-414-189-31	INDUCTOR	100µH		

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSISTOR>			
Q3201	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R3200	1-216-295-91	SHORT	0		
R3201	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R3202	1-208-792-11	METAL CHIP	2.7K	0.5%	1/10W
R3203	1-208-785-11	METAL CHIP	1.3K	0.5%	1/10W
R3204	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R3205	1-216-295-91	SHORT	0		
R3206	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3207	1-216-033-00	RES-CHIP	220	5%	1/10W
R3208	1-216-033-00	RES-CHIP	220	5%	1/10W
R3209	1-216-033-00	RES-CHIP	220	5%	1/10W
R3210	1-216-033-00	RES-CHIP	220	5%	1/10W
R3212	1-216-295-91	SHORT	0		
R3213	1-216-295-91	SHORT	0		
R3219	1-216-033-00	RES-CHIP	220	5%	1/10W
		<SWITCH>			
S3201	1-572-198-11	SWITCH, KEYBOARD (MENU)			
S3202	1-572-198-11	SWITCH, KEYBOARD (MENU +)			
S3203	1-572-198-11	SWITCH, KEYBOARD (MENU –)			
S3204	1-572-198-11	SWITCH, KEYBOARD (ENTER)			
S3205	1-572-198-11	SWITCH, KEYBOARD (AUTO CONVER)			
S3206	1-572-198-11	SWITCH, KEYBOARD (AUTO PROGR)			
**********					
	* A-1372-804-A	H2 BOARD, COMPLETE (ES43)			
		**********			
		<CAPACITOR>			
C3201	1-126-157-11	ELECT	10µF	20%	16V
C3202	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C3203	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C3206	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
		<CONNECTOR>			
CN3201	* 1-564-519-11	PLUG, CONNECTOR 4P			
CN3202	* 1-564-520-11	PLUG, CONNECTOR 5P			
CN3203	* 1-564-526-31	PLUG, CONNECTOR 11P			
		<DIODE>			
D3207	8-719-976-96	DIODE DTZ4.7C			
		<JACK>			
J3201	1-691-293-11	JACK (HEAD PHONE)			
J3202	1-565-665-12	TERMINAL, S 4P (VIDEO IN 4/S VIDEO)			
J3203	1-565-745-11	PIN JACK BLOCK 3P (VIDEO IN 4)			

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
	<COIL>				
L3201	1-414-189-31	INDUCTOR	100µH		
L3202	1-414-189-31	INDUCTOR	100µH		
	<TRANSISTOR>				
Q3201	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
	<RESISTOR>				
R3201	1-208-780-11	METAL CHIP	820	0.5%	1/10W
R3202	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R3203	1-208-793-11	METAL CHIP	3K	0.5%	1/10W
R3204	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R3205	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R3206	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R3207	1-208-792-11	METAL CHIP	2.7K	0.5%	1/10W
R3208	1-208-785-11	METAL CHIP	1.3K	0.5%	1/10W
R3209	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R3210	1-216-295-91	SHORT	0		
R3211	1-216-295-91	SHORT	0		
R3212	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3213	1-216-033-00	RES-CHIP	220	5%	1/10W
R3214	1-216-033-00	RES-CHIP	220	5%	1/10W
R3215	1-216-033-00	RES-CHIP	220	5%	1/10W
R3216	1-216-033-00	RES-CHIP	220	5%	1/10W
R3217	1-216-025-91	RES-CHIP	100	5%	1/10W
R3218	1-216-025-91	RES-CHIP	100	5%	1/10W
R3219	1-216-033-00	RES-CHIP	220	5%	1/10W
	<SWITCH>				
S3201	1-572-198-11	SWITCH, KEYBOARD (PROG +)			
S3202	1-572-198-11	SWITCH, KEYBOARD (PROG –)			
S3203	1-572-198-11	SWITCH, KEYBOARD (VOL +)			
S3204	1-572-198-11	SWITCH, KEYBOARD (VOL –)			
S3205	1-572-198-11	SWITCH, KEYBOARD (TV/VIDEO)			
S3206	1-572-198-11	SWITCH, KEYBOARD (MENU)			
S3207	1-572-198-11	SWITCH, KEYBOARD (MENU +)			
S3208	1-572-198-11	SWITCH, KEYBOARD (MENU –)			
S3209	1-572-198-11	SWITCH, KEYBOARD (ENTER)			
S3210	1-572-198-11	SWITCH, KEYBOARD (AUTO CONVER)			
S3211	1-572-198-11	SWITCH, KEYBOARD (AUTO PROGR)			
**********					
*	A-1372-789-A	H3 BOARD, COMPLETE (ES48, ES53, ES61)			
		**********			
	<CAPACITOR>				
CN3301	* 1-564-526-31	PLUG, CONNECTOR 11P			
	<JACK>				
J3301	1-568-807-21	TERMINAL BLOCK, (S) 4P (VIDEO IN 4)			
	<RESISTOR>				
R3301	1-216-025-00	RES-CHIP	100	5%	1/10W
R3302	1-216-025-00	RES-CHIP	100	5%	1/10W
**********					
*	A-1391-025-A	ZR BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q7408, Q7409)			
	<CAPACITOR>				
C7401	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C7402	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7403	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7404	1-104-664-11	ELECT	47µF	20%	16V
C7405	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7406	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7407	1-104-989-91	MYLAR	0.0022µF	10%	200V
C7408	1-104-989-91	MYLAR	0.0022µF	10%	200V
C7409	1-107-667-11	ELECT	2.2µF	20%	160V
C7410	1-130-471-00	MYLAR	0.001µF	5%	50V
C7411	1-130-471-00	MYLAR	0.001µF	5%	50V
C7412	1-107-364-11	MYLAR	0.01µF	10%	200V
C7413	1-126-968-11	ELECT	100µF	20%	50V
C7414	1-126-968-11	ELECT	100µF	20%	50V
C7415	1-107-645-11	ELECT	22µF	20%	200V
C7416	1-161-830-00	CERAMIC	0.0047µF		500V
C7418	1-126-935-11	ELECT	470µF	20%	6.3V
	<CONNECTOR>				
CN7401	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN7403	* 1-564-518-11	PLUG, CONNECTOR 3P			
CN7404	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN7405	* 1-580-844-11	PIN, CONNECTOR (POWER)			
	<DIODE>				
D7401	8-719-988-61	DIODE 1SS355TE-17			
D7403	8-719-921-86	DIODE MTZJ-13			
D7404	8-719-921-86	DIODE MTZJ-13			
	<CONNECTOR>				
DY7401	⚠ 1-451-476-21	DEFLECTION YOKE (R)			
	<COIL>				
L7401	1-412-911-11	FERRITE	0µH		
L7402	1-414-187-11	INDUCTOR	47µH		
	<TRANSISTOR>				
Q7401	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7402	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ZR ZG

REF.NO.	PART NO.	DESCRIPTION			REMARK
Q7403	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7405	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7406	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q7407	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q7408	8-729-045-04	TRANSISTOR 2SC5511			
Q7409	8-729-045-05	TRANSISTOR 2SA2005			
Q7410	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R7401	1-208-790-11	METAL CHIP	2.2K	0.5% 1/10W	
R7402	1-208-800-11	METAL CHIP	5.6K	0.5% 1/10W	
R7403	1-208-806-11	METAL CHIP	10K	0.5% 1/10W	
R7404	1-208-806-11	METAL CHIP	10K	0.5% 1/10W	
R7405	1-216-475-11	METAL OXIDE	120	5% 3W	
R7406	1-216-073-00	RES-CHIP	10K	5% 1/10W	
R7407	1-249-385-11	CARBON	2.2	5% 1/4W	
R7408	1-216-475-11	METAL OXIDE	120	5% 3W	
R7409	1-216-009-91	RES-CHIP	22	5% 1/10W	
R7410	1-216-009-91	RES-CHIP	22	5% 1/10W	
R7411	1-249-414-11	CARBON	560	5% 1/4W	
R7412	1-216-033-00	RES-CHIP	220	5% 1/10W	
R7413	1-216-049-91	RES-CHIP	1K	5% 1/10W	
R7414	1-216-033-00	RES-CHIP	220	5% 1/10W	
R7415	1-216-049-91	RES-CHIP	1K	5% 1/10W	
R7416	1-216-001-00	RES-CHIP	10	5% 1/10W	
R7417	1-249-414-11	CARBON	560	5% 1/4W	
R7418	1-216-001-00	RES-CHIP	10	5% 1/10W	
R7419	1-249-415-11	CARBON	680	5% 1/4W	
R7420	1-249-433-11	CARBON	22K	5% 1/4W	
R7421	1-249-433-11	CARBON	22K	5% 1/4W	
R7422	1-249-415-11	CARBON	680	5% 1/4W	
R7423	1-249-417-11	CARBON	1K	5% 1/4W	
R7424	1-249-405-11	CARBON	100	5% 1/4W	
R7425	1-249-385-11	CARBON	2.2	5% 1/4W	
R7426	1-249-385-11	CARBON	2.2	5% 1/4W	
R7427	1-249-405-11	CARBON	100	5% 1/4W	
R7428	1-215-913-11	METAL OXIDE	220	5% 3W	
R7431	1-216-049-91	RES-CHIP	1K	5% 1/10W	
R7432	1-216-025-91	RES-CHIP	100	5% 1/10W	
R7433	1-216-009-91	RES-CHIP	22	5% 1/10W	
R7434	1-216-295-91	SHORT	0		
**********					
*	A-1391-026-A	ZG BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			(Q7608, Q7609)
		<CAPACITOR>			
C7601	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C7602	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C7603	1-163-038-91	CERAMIC CHIP	0.1µF	25V	
C7604	1-104-664-11	ELECT	47µF	20% 16V	
C7605	1-104-989-91	MYLAR	0.0022µF	10% 200V	
C7606	1-104-989-91	MYLAR	0.0022µF	10% 200V	
C7607	1-107-667-11	ELECT	2.2µF	20% 160V	
C7608	1-130-471-00	MYLAR	0.001µF	5% 50V	
C7609	1-130-471-00	MYLAR	0.001µF	5% 50V	
C7610	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C7611	1-163-021-91	CERAMIC CHIP	0.01µF	10% 50V	
C7612	1-107-364-11	MYLAR	0.01µF	10% 200V	
C7613	1-126-968-11	ELECT	100µF	20% 50V	
C7614	1-126-968-11	ELECT	100µF	20% 50V	
C7615	1-107-645-11	ELECT	22µF	20% 200V	
C7616	1-161-830-00	CERAMIC	0.0047µF	500V	
C7617	1-106-220-00	MYLAR	0.1µF	10% 100V	
C7618	1-106-220-00	MYLAR	0.1µF	10% 100V	
C7620	1-126-935-11	ELECT	470µF	20% 6.3V	
C7621	1-126-960-11	ELECT	1µF	20% 50V	
		<CONNECTOR>			
CN7601	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN7602	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN7603	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN7604	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN7605	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN7606	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P			
CN7607	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN7608	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN7609	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D7601	8-719-921-86	DIODE MTZJ-13			
D7602	8-719-921-86	DIODE MTZJ-13			
D7603	8-719-988-61	DIODE 1SS355TE-17			
		<CONNECTOR>			
DY7601	⚠ 1-451-476-21	DEFLECTION YOKE (G)			
		<COIL>			
L7601	1-412-911-11	FERRITE	0µH		
L7602	1-414-187-11	INDUCTOR	47µH		
		<TRANSISTOR>			
Q7601	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7602	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q7603	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q7604	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7605	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7606	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7607	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7608	8-729-045-04	TRANSISTOR 2SC5511			
Q7609	8-729-045-05	TRANSISTOR 2SA2005			
Q7610	8-729-120-28	TRANSISTOR 2SC1623-L5L6			

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

KP-ES43HK1/ME1/MN1/SN1, ES48HK1/ME1/MN1/SN1, ES53HK1/ME1/MN1/SN1, ES61HK1/ME1/MN1/SN1 RM-961

ZG ZB

REF.NO.	PART NO.	DESCRIPTION			REMARK
	<RESISTOR>				
R7601	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R7602	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R7603	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R7604	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R7605	1-216-475-11	METAL OXIDE	120	5%	3W
R7606	1-216-033-00	RES-CHIP	220	5%	1/10W
R7607	1-216-033-00	RES-CHIP	220	5%	1/10W
R7608	1-249-393-11	CARBON	10	5%	1/4W
R7609	1-216-001-00	RES-CHIP	10	5%	1/10W
R7610	1-249-385-11	CARBON	2.2	5%	1/4W
R7611	1-216-475-11	METAL OXIDE	120	5%	3W
R7612	1-249-414-11	CARBON	560	5%	1/4W
R7613	1-216-073-00	RES-CHIP	10K	5%	1/10W
R7614	1-249-414-11	CARBON	560	5%	1/4W
R7615	1-249-415-11	CARBON	680	5%	1/4W
R7616	1-249-433-11	CARBON	22K	5%	1/4W
R7617	1-249-433-11	CARBON	22K	5%	1/4W
R7618	1-249-415-11	CARBON	680	5%	1/4W
R7619	1-216-009-91	RES-CHIP	22	5%	1/10W
R7620	1-216-009-91	RES-CHIP	22	5%	1/10W
R7621	1-249-417-11	CARBON	1K	5%	1/4W
R7622	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7623	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7624	1-249-405-11	CARBON	100	5%	1/4W
R7625	1-249-385-11	CARBON	2.2	5%	1/4W
R7626	1-249-385-11	CARBON	2.2	5%	1/4W
R7627	1-249-405-11	CARBON	100	5%	1/4W
R7628	1-215-913-11	METAL OXIDE	220	5%	3W
R7631	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7632	1-216-025-91	RES-CHIP	100	5%	1/10W
R7633	1-216-009-91	RES-CHIP	22	5%	1/10W
R7634	1-216-295-91	SHORT	0		
**********					
*	A-1391-027-A	ZB BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			(Q7808, Q7809)
	<CAPACITOR>				
C7801	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7802	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7803	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C7804	1-104-664-11	ELECT	47µF	20%	16V
C7805	1-104-989-91	MYLAR	0.0022µF	10%	200V
C7806	1-104-989-91	MYLAR	0.0022µF	10%	200V
C7807	1-107-667-11	ELECT	2.2µF	20%	160V
C7808	1-130-471-00	MYLAR	0.001µF	5%	50V
C7809	1-130-471-00	MYLAR	0.001µF	5%	50V
C7810	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7811	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7812	1-107-364-11	MYLAR	0.01µF	10%	200V
C7813	1-126-968-11	ELECT	100µF	20%	50V
C7814	1-126-968-11	ELECT	100µF	20%	50V
C7815	1-107-645-11	ELECT	22µF	20%	200V
C7816	1-161-830-00	CERAMIC	0.0047µF		500V
C7818	1-126-935-11	ELECT	470µF	20%	6.3V
	<CONNECTOR>				
CN7801 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN7802 *	1-564-507-11	PLUG, CONNECTOR 4P			
CN7803 *	1-564-506-11	PLUG, CONNECTOR 3P			
CN7804 *	1-580-844-11	PIN, CONNECTOR (POWER)			
CN7805 *	1-564-506-11	PLUG, CONNECTOR 3P			
	<DIODE>				
D7801	8-719-921-86	DIODE MTZJ-13			
D7802	8-719-921-86	DIODE MTZJ-13			
D7803	8-719-988-61	DIODE 1SS355TE-17			
	<CONNECTOR>				
DY7801⚠	1-451-476-21	DEFLECTION YOKE (B)			
	<COIL>				
L7801	1-412-911-11	FERRITE	0µH		
L7802	1-414-187-11	INDUCTOR	47µH		
	<TRANSISTOR>				
Q7801	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7802	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q7803	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q7804	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7805	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7806	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7807	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7808	8-729-045-04	TRANSISTOR 2SC5511			
Q7809	8-729-045-05	TRANSISTOR 2SA2005			
Q7810	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
	<RESISTOR>				
R7801	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R7802	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R7803	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R7804	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R7805	1-216-033-00	RES-CHIP	220	5%	1/10W
R7806	1-216-033-00	RES-CHIP	220	5%	1/10W
R7807	1-216-475-11	METAL OXIDE	120	5%	3W
R7808	1-216-001-00	RES-CHIP	10	5%	1/10W
R7809	1-216-001-00	RES-CHIP	10	5%	1/10W
R7810	1-249-385-11	CARBON	2.2	5%	1/4W
R7811	1-216-475-11	METAL OXIDE	120	5%	3W
R7812	1-216-073-00	RES-CHIP	10K	5%	1/10W
R7813	1-249-414-11	CARBON	560	5%	1/4W
R7814	1-216-009-91	RES-CHIP	22	5%	1/10W
R7815	1-216-009-91	RES-CHIP	22	5%	1/10W

ZB CR

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R7816	1-249-414-11	CARBON	560	5%	1/4W
R7817	1-249-415-11	CARBON	680	5%	1/4W
R7818	1-249-433-11	CARBON	22K	5%	1/4W
R7819	1-249-433-11	CARBON	22K	5%	1/4W
R7820	1-249-415-11	CARBON	680	5%	1/4W
R7821	1-249-417-11	CARBON	1K	5%	1/4W
R7822	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7823	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7824	1-249-405-11	CARBON	100	5%	1/4W
R7825	1-249-385-11	CARBON	2.2	5%	1/4W
R7826	1-249-385-11	CARBON	2.2	5%	1/4W
R7827	1-249-405-11	CARBON	100	5%	1/4W
R7828	1-215-913-11	METAL OXIDE	220	5%	3W
R7831	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7832	1-216-025-91	RES-CHIP	100	5%	1/10W
R7833	1-216-009-91	RES-CHIP	22	5%	1/10W
R7834	1-216-295-91	SHORT	0		

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* A-1332-037-A CR BOARD, COMPLETE
****

4-382-854-01 SCREW (M3X8), P, SW (+) (IC7101)

<CAPACITOR>

C7102	1-162-115-00	CERAMIC	330pF	10%	2KV
C7103	1-107-652-11	ELECT	10µF	20%	250V
C7104	1-126-768-11	ELECT	2200µF	20%	16V
C7105	1-162-115-00	CERAMIC	330pF	10%	2KV
C7106	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C7107	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C7108	1-126-967-11	ELECT	47µF	20%	50V
C7110	1-102-050-00	CERAMIC	0.01µF	99%	500V
C7111	1-161-830-00	CERAMIC	0.0047µF		500V
C7112	1-163-224-11	CERAMIC CHIP	7pF	0.25pF	50V
C7116	1-107-957-11	ELECT	1µF	20%	250V
C7118	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

<CONNECTOR>

CN7101	* 1-564-512-11	PLUG, CONNECTOR 9P
CN7102	* 1-564-510-11	PLUG, CONNECTOR 7P
CN7103	* 1-564-512-11	PLUG, CONNECTOR 9P
CN7104	1-785-879-11	CONNECTOR, ONE TOUCH
CN7107	1-695-915-11	TAB (CONTACT)

<DIODE>

D7102	8-719-921-86	DIODE MTZJ-13
D7103	8-719-901-83	DIODE 1SS83
D7104	8-719-901-83	DIODE 1SS83
D7105	8-719-901-83	DIODE 1SS83
D7106	8-719-901-83	DIODE 1SS83
D7108	8-719-988-61	DIODE 1SS355TE-17
D7109	8-719-921-86	DIODE MTZJ-13
D7110	8-719-921-86	DIODE MTZJ-13

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<IC>			
IC7101	8-759-360-83	IC TDA6111Q/N4			
		<JACK>			
J7101	⚠1-251-182-41	SOCKET, PICTURE TUBE			
		<COIL>			
L7102	1-414-223-11	INDUCTOR	470µH		
L7103	1-414-181-11	INDUCTOR	4.7µH		
L7104	1-414-187-11	INDUCTOR	47µH		
		<NEON LAMP>			
NL7101	1-576-354-21	GAP, SPARK			
NL7102	1-517-729-31	GAP, SPARK			
NL7103	1-576-354-21	GAP, SPARK			
NL7104	1-576-354-21	GAP, SPARK			
NL7105	1-576-354-21	GAP, SPARK			
		<TRANSISTOR>			
Q7101	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7103	8-729-255-12	TRANSISTOR 2SC2551-O			
Q7104	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
		<RESISTOR>			
R7101	1-260-132-11	CARBON	560K	5%	1/2W
R7102	1-249-389-11	CARBON	4.7	5%	1/4W
R7103	1-216-295-91	SHORT	0		
R7105	1-260-117-11	CARBON	33K	5%	1/2W
R7106	1-219-743-11	CARBON	100	5%	1/2W
R7107	1-208-801-11	METAL CHIP	6.2K	0.5%	1/10W
R7108	1-260-133-11	CARBON	680K	5%	1/2W
R7109	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R7110	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R7111	1-216-033-00	RES-CHIP	220	5%	1/10W
R7112	1-249-424-11	CARBON	3.9K	5%	1/4W
R7113	1-216-295-91	SHORT	0		
R7114	1-216-660-11	METAL CHIP	2.4K	0.5%	1/10W
R7115	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R7116	1-215-929-11	METAL OXIDE	100K	5%	3W
R7117	1-260-093-11	CARBON	330	5%	1/2W
R7118	1-260-087-11	CARBON	100	5%	1/2W
R7119	1-260-099-11	CARBON	1K	5%	1/2W
R7120	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7122	1-216-025-91	RES-CHIP	100	5%	1/10W
R7123	1-216-295-91	SHORT	0		
R7124	1-216-073-00	RES-CHIP	10K	5%	1/10W
R7128	1-208-818-11	METAL CHIP	33K	0.5%	1/10W
R7129	1-249-417-11	CARBON	1K	5%	1/4W
R7130	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R7131	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7132	1-216-295-91	SHORT	0		

REF.NO.	PART NO.	DESCRIPTION			REMARK
R7133	1-208-834-11	METAL CHIP	150K	0.5%	1/10W
R7134	1-216-049-91	RES-CHIP	1K	5%	1/10W
R7135	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
		<SPARK GAP>			
SG7101	1-519-422-11	GAP, SPARK			
SG7103	1-519-422-11	GAP, SPARK			
		<TEST PIN>			
TP7102	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
TP7105	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
**********					
	*A-1332-038-A	CG BOARD, COMPLETE			
		**********			
	4-382-854-01	SCREW (M3X8), P, SW (+) (IC7201)			
		<CAPACITOR>			
C7202	1-162-115-00	CERAMIC	330pF	10%	2KV
C7203	1-126-768-11	ELECT	2200µF	20%	16V
C7204	1-107-652-11	ELECT	10µF	20%	250V
C7205	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C7206	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C7207	1-162-115-00	CERAMIC	330pF	10%	2KV
C7208	1-126-967-11	ELECT	47µF	20%	50V
C7209	1-102-050-00	CERAMIC	0.01µF	99%	500V
C7211	1-161-830-00	CERAMIC	0.0047µF		500V
C7212	1-163-091-00	CERAMIC CHIP	8pF	0.25pF	50V
C7213	1-163-085-00	CERAMIC CHIP	2pF	0.25pF	50V
C7214	1-126-964-11	ELECT	10µF	20%	50V
C7216	1-107-957-11	ELECT	1µF	20%	250V
		<CONNECTOR>			
CN7201	*1-564-510-11	PLUG, CONNECTOR 7P			
CN7202	*1-564-509-11	PLUG, CONNECTOR 6P			
CN7203	*1-564-512-11	PLUG, CONNECTOR 9P			
CN7204	*1-564-512-11	PLUG, CONNECTOR 9P			
CN7205	1-785-879-11	CONNECTOR, ONE TOUCH			
CN7208	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D7202	8-719-921-86	DIODE MTZJ-13			
D7203	8-719-901-83	DIODE 1SS83			
D7204	8-719-901-83	DIODE 1SS83			
D7205	8-719-901-83	DIODE 1SS83			
D7206	8-719-901-83	DIODE 1SS83			
D7208	8-719-988-61	DIODE 1SS355TE-17			
		<IC>			
IC7201	8-759-360-83	IC TDA6111Q/N4			

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<JACK>			
J7201	⚠1-251-182-41	SOCKET, PICTURE TUBE			
		<COIL>			
L7201	1-414-223-11	INDUCTOR	470µH		
L7203	1-414-181-11	INDUCTOR	4.7µH		
L7204	1-414-187-11	INDUCTOR	47µH		
		<NEON LAMP>			
NL7201	1-576-354-21	GAP, SPARK			
NL7202	1-576-354-21	GAP, SPARK			
NL7203	1-517-729-31	GAP, SPARK			
NL7204	1-576-354-21	GAP, SPARK			
NL7205	1-576-354-21	GAP, SPARK			
		<TRANSISTOR>			
Q7201	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7202	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q7203	8-729-255-12	TRANSISTOR 2SC2551-O			
		<RESISTOR>			
R7201	1-260-132-11	CARBON	560K	5%	1/2W
R7202	1-216-295-91	SHORT	0		
R7203	1-208-846-11	METAL CHIP	470K	0.5%	1/10W
R7204	1-219-743-11	CARBON	100	5%	1/2W
R7205	1-260-117-11	CARBON	33K	5%	1/2W
R7206	1-208-801-11	METAL CHIP	6.2K	0.5%	1/10W
R7207	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R7208	1-216-033-00	RES-CHIP	220	5%	1/10W
R7209	1-260-133-11	CARBON	680K	5%	1/2W
R7210	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R7211	1-249-424-11	CARBON	3.9K	5%	1/4W
R7212	1-208-789-11	METAL CHIP	2K	0.5%	1/10W
R7213	1-215-929-11	METAL OXIDE	100K	5%	3W
R7214	1-216-295-91	SHORT	0		
R7215	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R7216	1-260-093-11	CARBON	330	5%	1/2W
R7217	1-216-295-91	SHORT	0		
R7218	1-260-099-11	CARBON	1K	5%	1/2W
R7219	1-216-295-91	SHORT	0		
R7220	1-216-025-91	RES-CHIP	100	5%	1/10W
R7222	1-216-295-91	SHORT	0		
R7223	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R7224	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R7225	1-216-081-00	RES-CHIP	22K	5%	1/10W
R7229	1-249-417-11	CARBON	1K	5%	1/4W
R7235	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
		<SPARK GAP>			
SG7201	1-519-422-11	GAP, SPARK			
SG7203	1-519-422-11	GAP, SPARK			

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

CG **CB**

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<TEST PIN>			
TP7202	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
TP7205	*1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
**********					
	*A-1332-039-A	CB BOARD, COMPLETE			
		**********			
	4-382-854-01	SCREW (M3X8), P, SW (+) (IC7301)			
		<CAPACITOR>			
C7302	1-162-115-00	CERAMIC	330pF	10% 2KV	
C7303	1-162-115-00	CERAMIC	330pF	10% 2KV	
C7304	1-126-768-11	ELECT	2200µF	20% 16V	
C7305	1-163-038-91	CERAMIC CHIP	0.1µF	25V	
C7306	1-163-038-91	CERAMIC CHIP	0.1µF	25V	
C7307	1-107-652-11	ELECT	10µF	20% 250V	
C7308	1-126-967-11	ELECT	47µF	20% 50V	
C7309	1-163-085-00	CERAMIC CHIP	2pF	0.25pF 50V	
C7311	1-102-050-00	CERAMIC	0.01µF	99% 500V	
C7312	1-161-830-00	CERAMIC	0.0047µF	500V	
C7313	1-163-091-00	CERAMIC CHIP	8pF	0.25pF 50V	
C7314	1-126-964-11	ELECT	10µF	20% 50V	
C7315	1-126-960-11	ELECT	1µF	20% 50V	
C7318	1-107-957-11	ELECT	1µF	20% 250V	
		<CONNECTOR>			
CN7301	*1-564-509-11	PLUG, CONNECTOR 6P			
CN7302	*1-564-512-11	PLUG, CONNECTOR 9P			
CN7303	*1-564-512-11	PLUG, CONNECTOR 9P			
CN7304	1-785-879-11	CONNECTOR, ONE TOUCH			
CN7307	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D7302	8-719-921-86	DIODE MTZJ-13			
D7303	8-719-901-83	DIODE 1SS83			
D7304	8-719-901-83	DIODE 1SS83			
D7305	8-719-901-83	DIODE 1SS83			
D7306	8-719-901-83	DIODE 1SS83			
D7307	8-719-988-61	DIODE 1SS355TE-17			
D7308	8-719-921-88	DIODE MTZJ-13B			
D7309	8-719-988-61	DIODE 1SS355TE-17			
D7311	8-719-921-86	DIODE MTZJ-13			
D7312	8-719-921-86	DIODE MTZJ-13			
		<IC>			
IC7301	8-759-360-83	IC TDA6111Q/N4			
		<JACK>			
J7301	⚠1-251-182-41	SOCKET, PICTURE TUBE			

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<COIL>			
L7301	1-414-223-11	INDUCTOR	470µH		
L7303	1-414-181-11	INDUCTOR	4.7µH		
L7304	1-414-187-11	INDUCTOR	47µH		
		<NEON LAMP>			
NL7301	1-576-354-21	GAP, SPARK			
NL7302	1-517-729-31	GAP, SPARK			
NL7303	1-576-354-21	GAP, SPARK			
NL7304	1-576-354-21	GAP, SPARK			
NL7305	1-576-354-21	GAP, SPARK			
		<TRANSISTOR>			
Q7301	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q7302	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q7303	8-729-255-12	TRANSISTOR	2SC2551-O		
Q7305	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q7306	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
		<RESISTOR>			
R7301	1-219-743-11	CARBON	100	5% 1/2W	
R7302	1-260-132-11	CARBON	560K	5% 1/2W	
R7304	1-216-295-91	SHORT	0		
R7306	1-260-099-11	CARBON	1K	5% 1/2W	
R7307	1-208-801-11	METAL CHIP	6.2K	0.5% 1/10W	
R7308	1-260-133-11	CARBON	680K	5% 1/2W	
R7309	1-208-790-11	METAL CHIP	2.2K	0.5% 1/10W	
R7310	1-216-295-91	SHORT	0		
R7311	1-208-808-11	METAL CHIP	12K	0.5% 1/10W	
R7312	1-216-660-11	METAL CHIP	2.4K	0.5% 1/10W	
R7313	1-216-033-00	RES-CHIP	220	5% 1/10W	
R7314	1-249-424-11	CARBON	3.9K	5% 1/4W	
R7315	1-216-295-91	SHORT	0		
R7316	1-215-929-11	METAL OXIDE	100K	5% 3W	
R7317	1-260-093-11	CARBON	330	5% 1/2W	
R7318	1-216-295-91	SHORT	0		
R7319	1-208-798-11	METAL CHIP	4.7K	0.5% 1/10W	
R7320	1-260-087-11	CARBON	100	5% 1/2W	
R7321	1-260-117-11	CARBON	33K	5% 1/2W	
R7322	1-208-782-11	METAL CHIP	1K	0.5% 1/10W	
R7323	1-216-025-91	RES-CHIP	100	5% 1/10W	
R7324	1-216-295-91	SHORT	0		
R7326	1-208-803-11	METAL CHIP	7.5K	0.5% 1/10W	
R7327	1-208-798-11	METAL CHIP	4.7K	0.5% 1/10W	
R7328	1-216-073-00	RES-CHIP	10K	5% 1/10W	
R7329	1-216-091-00	RES-CHIP	56K	5% 1/10W	
R7330	1-216-081-00	RES-CHIP	22K	5% 1/10W	
R7331	1-216-055-00	RES-CHIP	1.8K	5% 1/10W	
R7332	1-216-081-00	RES-CHIP	22K	5% 1/10W	
R7335	1-249-417-11	CARBON	1K	5% 1/4W	
R7336	1-216-053-00	RES-CHIP	1.5K	5% 1/10W	

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<SPARK GAP>			
SG7301	1-519-422-11	GAP, SPARK			
SG7303	1-519-422-11	GAP, SPARK			
		<TEST PIN>			
TP7302	* 1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
TP7304	* 1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
**********					
	* A-1136-087-A	B3 BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C302	1-117-136-11	ELECT CHIP	10µF	20%	6.3V
C305	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C306	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C309	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C310	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C312	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C313	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C314	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C315	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C316	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C317	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C318	1-124-779-00	ELECT CHIP	10µF	20%	16V
C319	1-126-394-11	ELECT CHIP	10µF	20%	16V
C320	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C321	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C323	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C324	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C325	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C327	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C330	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C331	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C332	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C333	1-216-295-91	SHORT	0		
C337	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C338	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C339	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C340	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C341	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C346	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C347	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C349	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C350	1-126-396-11	ELECT CHIP	47µF	20%	16V
C353	1-126-204-11	ELECT CHIP	47µF	20%	16V
C354	1-117-136-11	ELECT CHIP	10µF	20%	6.3V
C355	1-117-136-11	ELECT CHIP	10µF	20%	6.3V
C361	1-124-779-00	ELECT CHIP	10µF	20%	16V
C362	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C363	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C501	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C502	1-124-779-00	ELECT CHIP	10µF	20%	16V
C503	1-124-779-00	ELECT CHIP	10µF	20%	16V
C505	1-124-779-00	ELECT CHIP	10µF	20%	16V
C507	1-124-779-00	ELECT CHIP	10µF	20%	16V
C509	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C510	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C511	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C512	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C514	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C515	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C516	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C517	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C518	1-126-204-11	ELECT CHIP	47µF	20%	16V
C519	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C520	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C521	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C522	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C523	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C524	1-124-779-00	ELECT CHIP	10µF	20%	16V
C525	1-126-394-11	ELECT CHIP	10µF	20%	16V
C526	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C527	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C528	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C530	1-216-295-91	SHORT	0		
C532	1-216-295-91	SHORT	0		
C534	1-216-295-91	SHORT	0		
C538	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C539	1-126-204-11	ELECT CHIP	47µF	20%	16V
C540	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C542	1-126-204-11	ELECT CHIP	47µF	20%	16V
C543	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C545	1-126-396-11	ELECT CHIP	47µF	20%	16V
C546	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C548	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C549	1-126-204-11	ELECT CHIP	47µF	20%	16V
C550	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C551	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C554	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C555	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C556	1-126-392-11	ELECT CHIP	100µF	20%	6.3V
C557	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C559	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C560	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C601	1-126-394-11	ELECT CHIP	10µF	20%	16V
C602	1-126-394-11	ELECT CHIP	10µF	20%	16V
C603	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C604	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C605	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C606	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C607	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C608	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C609	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C610	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C611	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C612	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C613	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C614	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C615	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V

B3

REF.NO.	PART NO.	DESCRIPTION	REMARK
C616	1-126-396-11	ELECT CHIP 47µF 20%	16V
C617	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C618	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C619	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C620	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C621	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C622	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C623	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C624	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C625	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C626	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C627	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C628	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C629	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C630	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C631	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C632	1-126-206-11	ELECT CHIP 100µF 20%	6.3V
C633	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C634	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C635	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C636	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C637	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C638	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C639	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C640	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C642	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C643	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C644	1-126-398-11	ELECT CHIP 4.7µF 20%	35V
C645	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C801	1-124-779-00	ELECT CHIP 10µF 20%	16V
C802	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C803	1-124-779-00	ELECT CHIP 10µF 20%	16V
C804	1-124-779-00	ELECT CHIP 10µF 20%	16V
C806	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C807	1-124-779-00	ELECT CHIP 10µF 20%	16V
C808	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C809	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C810	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C811	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C812	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C813	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C814	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C815	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C816	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C817	1-163-229-11	CERAMIC CHIP 12pF 5%	50V
C818	1-163-229-11	CERAMIC CHIP 12pF 5%	50V
C819	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C820	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C821	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C822	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C823	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C824	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C825	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C827	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C829	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C834	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C835	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C837	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C839	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C840	1-126-206-11	ELECT CHIP 100µF 20%	6.3V
C841	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C842	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C843	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C844	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C848	1-163-017-00	CERAMIC CHIP 0.0047µF 10%	50V
C849	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C850	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C851	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C852	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C853	1-164-182-11	CERAMIC CHIP 0.0033µF 10%	50V
C854	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C901	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C902	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C903	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C904	1-124-779-00	ELECT CHIP 10µF 20%	16V
C905	1-109-982-11	CERAMIC CHIP 1µF 10%	10V
C906	1-124-779-00	ELECT CHIP 10µF 20%	16V
C907	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C908	1-163-031-11	CERAMIC CHIP 0.01µF	50V
C909	1-126-396-11	ELECT CHIP 47µF 20%	16V
C910	1-163-009-11	CERAMIC CHIP 0.001µF 10%	50V
C913	1-163-031-11	CERAMIC CHIP 0.01µF	50V
C914	1-126-394-11	ELECT CHIP 10µF 20%	16V
C950	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C954	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
		<CONNECTOR>	
CN502	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
		<DIODE>	
D301	8-719-041-97	DIODE MA113-(TX)	
D302	8-719-041-97	DIODE MA113-(TX)	
D501	8-719-422-12	DIODE MA8039	
D601	8-719-073-01	DIODE MA111-(K8).S0	
		<FERRITBEAD>	
FB501	1-414-813-11	FERRITE 0µH	
FB502	1-414-813-11	FERRITE 0µH	
FB503	1-414-813-11	FERRITE 0µH	
FB504	1-414-813-11	FERRITE 0µH	
FB601	1-414-553-11	FERRITE 0µH	
FB801	1-414-553-11	FERRITE 0µH	
FB802	1-414-553-11	FERRITE 0µH	
		<FILTER>	
FL304	1-234-177-21	FILTER, CHIP EMI	
FL305	1-234-177-21	FILTER, CHIP EMI	
FL306	1-239-558-11	FILTER, CHIP EMI	

REF.NO.	PART NO.	DESCRIPTION	REMARK
FL501	1-233-877-11	FILTER, LOW PASS	
FL502	1-233-504-21	FILTER, LOW PASS	
FL503	1-233-504-21	FILTER, LOW PASS	
FL504	1-234-177-21	FILTER, CHIP EMI	
FL505	1-234-177-21	FILTER, CHIP EMI	
FL506	1-234-177-21	FILTER, CHIP EMI	
FL508	1-234-177-21	FILTER, CHIP EMI	
FL509	1-234-177-21	FILTER, CHIP EMI	
FL510	1-234-177-21	FILTER, CHIP EMI	
FL511	1-234-177-21	FILTER, CHIP EMI	
FL512	1-234-177-21	FILTER, CHIP EMI	
FL601	1-234-177-21	FILTER, CHIP EMI	
FL602	1-234-177-21	FILTER, CHIP EMI	
FL603	1-234-177-21	FILTER, CHIP EMI	
FL606	1-239-560-11	FILTER, CHIP EMI	
FL801	1-234-177-21	FILTER, CHIP EMI	
FL802	1-234-177-21	FILTER, CHIP EMI	
FL803	1-234-177-21	FILTER, CHIP EMI	
FL804	1-234-177-21	FILTER, CHIP EMI	
FL805	1-234-177-21	FILTER, CHIP EMI	
FL806	1-234-177-21	FILTER, CHIP EMI	
FL807	1-234-177-21	FILTER, CHIP EMI	
FL808	1-234-177-21	FILTER, CHIP EMI	
FL810	1-234-177-21	FILTER, CHIP EMI	
FL901	1-234-509-21	FILTER, LOW PASS	
FL902	1-233-876-11	FILTER, LOW PASS	
FL903	1-233-876-11	FILTER, LOW PASS	
FL904	1-234-177-21	FILTER, CHIP EMI	
FL905	1-234-177-21	FILTER, CHIP EMI	
FL906	1-234-177-21	FILTER, CHIP EMI	
FL907	1-234-177-21	FILTER, CHIP EMI	
		<IC>	
IC302	8-752-388-98	IC CXD2303AQ	
IC303	8-752-088-27	IC CXA3266Q-T6	
IC309	8-759-640-16	IC TC7SET04F(TE85R)	
IC311	8-759-708-05	IC NJM78L05A	
IC501	8-759-447-90	IC TLC5733AIPM	
IC504	8-759-669-78	IC TLC2933IPWR-12	
IC505	8-759-640-16	IC TC7SET04F(TE85R)	
IC506	8-759-640-16	IC TC7SET04F(TE85R)	
IC601	8-752-398-47	IC CXD2090Q	
IC602	8-759-665-38	IC MB81F161622C-80FN	
IC603	8-759-669-75	IC TLC2932IPWR	
IC604	8-752-072-94	IC CXA1875AM-T4	
IC801	8-759-672-57	IC CXD9509AQ	
IC802	8-759-595-53	IC MB81F643242B-10FN	
IC803	8-759-460-29	IC PST9120NL	
IC901	8-752-369-84	IC CXD2309Q-T6	
IC902	8-759-683-19	IC MB94918RPF-G124-BND	
IC903	8-759-575-71	IC M24C04-WMN6T	
IC904	8-759-349-11	IC PST9145NL	

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<COIL>			
L302	1-412-029-11	INDUCTOR CHIP	10µH		
L303	1-412-029-11	INDUCTOR CHIP	10µH		
L501	1-412-026-11	INDUCTOR CHIP	1µH		
L502	1-412-026-11	INDUCTOR CHIP	1µH		
L503	1-412-026-11	INDUCTOR CHIP	1µH		
L504	1-412-026-11	INDUCTOR CHIP	1µH		
L505	1-412-029-11	INDUCTOR CHIP	10µH		
L506	1-412-026-11	INDUCTOR CHIP	1µH		
L508	1-412-029-11	INDUCTOR CHIP	10µH		
L509	1-412-029-11	INDUCTOR CHIP	10µH		
L511	1-412-026-11	INDUCTOR CHIP	1µH		
L512	1-412-026-11	INDUCTOR CHIP	1µH		
L604	1-412-029-11	INDUCTOR CHIP	10µH		
L605	1-412-029-11	INDUCTOR CHIP	10µH		
		<TRANSISTOR>			
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q501	8-729-216-22	TRANSISTOR 2SA1162-G			
Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q503	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q511	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q516	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q517	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q518	8-729-216-22	TRANSISTOR 2SA1162-G			
Q519	1-801-806-11	TRANSISTOR DTC144EKA			
Q520	1-801-806-11	TRANSISTOR DTC144EKA			
Q521	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q522	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q523	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q524	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q601	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q602	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q901	8-729-216-22	TRANSISTOR 2SA1162-G			
Q902	8-729-216-22	TRANSISTOR 2SA1162-G			
Q903	8-729-216-22	TRANSISTOR 2SA1162-G			
Q904	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			
Q905	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			
Q906	1-801-806-11	TRANSISTOR DTC144EKA			
Q907	8-729-216-22	TRANSISTOR 2SA1162-G			
Q908	8-729-216-22	TRANSISTOR 2SA1162-G			
Q909	8-729-216-22	TRANSISTOR 2SA1162-G			
		<RESISTOR>			
R302	1-216-013-00	RES-CHIP	33	5%	1/10W
R303	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R305	1-216-049-91	RES-CHIP	1K	5%	1/10W
R306	1-208-789-11	METAL CHIP	2K	0.5%	1/10W
R309	1-216-009-91	RES-CHIP	22	5%	1/10W
R310	1-216-009-91	RES-CHIP	22	5%	1/10W

B3

REF.NO.	PART NO.	DESCRIPTION			REMARK
R311	1-216-009-91	RES-CHIP	22	5%	1/10W
R313	1-216-009-91	RES-CHIP	22	5%	1/10W
R316	1-216-009-91	RES-CHIP	22	5%	1/10W
R318	1-216-009-91	RES-CHIP	22	5%	1/10W
R319	1-216-049-91	RES-CHIP	1K	5%	1/10W
R321	1-216-009-91	RES-CHIP	22	5%	1/10W
R323	1-216-009-91	RES-CHIP	22	5%	1/10W
R324	1-216-009-91	RES-CHIP	22	5%	1/10W
R325	1-216-073-00	RES-CHIP	10K	5%	1/10W
R328	1-216-025-91	RES-CHIP	100	5%	1/10W
R330	1-216-037-00	RES-CHIP	330	5%	1/10W
R331	1-216-033-00	RES-CHIP	220	5%	1/10W
R332	1-216-037-00	RES-CHIP	330	5%	1/10W
R333	1-216-295-91	SHORT	0		
R335	1-216-013-00	RES-CHIP	33	5%	1/10W
R336	1-216-013-00	RES-CHIP	33	5%	1/10W
R337	1-216-097-91	RES-CHIP	100K	5%	1/10W
R338	1-216-295-91	SHORT	0		
R339	1-216-295-91	SHORT	0		
R347	1-216-295-91	SHORT	0		
R350	1-216-295-91	SHORT	0		
R501	1-216-025-91	RES-CHIP	100	5%	1/10W
R502	1-216-025-91	RES-CHIP	100	5%	1/10W
R503	1-216-295-91	SHORT	0		
R504	1-216-295-91	SHORT	0		
R505	1-216-295-91	SHORT	0		
R506	1-216-009-91	RES-CHIP	22	5%	1/10W
R507	1-216-009-91	RES-CHIP	22	5%	1/10W
R508	1-216-025-91	RES-CHIP	100	5%	1/10W
R509	1-216-025-91	RES-CHIP	100	5%	1/10W
R510	1-216-043-91	RES-CHIP	560	5%	1/10W
R511	1-216-043-91	RES-CHIP	560	5%	1/10W
R512	1-216-043-91	RES-CHIP	560	5%	1/10W
R513	1-216-043-91	RES-CHIP	560	5%	1/10W
R514	1-216-043-91	RES-CHIP	560	5%	1/10W
R515	1-216-043-91	RES-CHIP	560	5%	1/10W
R516	1-216-049-91	RES-CHIP	1K	5%	1/10W
R517	1-216-049-91	RES-CHIP	1K	5%	1/10W
R518	1-216-295-91	SHORT	0		
R520	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R521	1-216-295-91	SHORT	0		
R523	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R524	1-216-295-91	SHORT	0		
R526	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R528	1-216-037-00	RES-CHIP	330	5%	1/10W
R529	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R530	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R531	1-216-031-00	RES-CHIP	180	5%	1/10W
R532	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R533	1-216-031-00	RES-CHIP	180	5%	1/10W
R536	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R537	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R540	1-216-049-91	RES-CHIP	1K	5%	1/10W
R548	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R549	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R550	1-208-756-11	METAL CHIP	82	0.5%	1/10W
R551	1-208-756-11	METAL CHIP	82	0.5%	1/10W
R552	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R553	1-216-295-91	SHORT	0		
R554	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R555	1-216-077-91	RES-CHIP	15K	5%	1/10W
R557	1-216-049-91	RES-CHIP	1K	5%	1/10W
R558	1-216-025-91	RES-CHIP	100	5%	1/10W
R559	1-216-077-91	RES-CHIP	15K	5%	1/10W
R560	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R561	1-216-043-91	RES-CHIP	560	5%	1/10W
R562	1-216-043-91	RES-CHIP	560	5%	1/10W
R563	1-216-043-91	RES-CHIP	560	5%	1/10W
R571	1-216-295-91	SHORT	0		
R572	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R573	1-208-810-11	METAL CHIP	15K	0.5%	1/10W
R574	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R575	1-208-756-11	METAL CHIP	82	0.5%	1/10W
R576	1-208-756-11	METAL CHIP	82	0.5%	1/10W
R577	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R578	1-208-750-11	METAL CHIP	47	0.5%	1/10W
R579	1-216-077-91	RES-CHIP	15K	5%	1/10W
R580	1-216-295-91	SHORT	0		
R582	1-216-041-00	RES-CHIP	470	5%	1/10W
R584	1-216-041-00	RES-CHIP	470	5%	1/10W
R594	1-216-041-00	RES-CHIP	470	5%	1/10W
R596	1-216-049-91	RES-CHIP	1K	5%	1/10W
R597	1-216-073-00	RES-CHIP	10K	5%	1/10W
R598	1-216-025-91	RES-CHIP	100	5%	1/10W
R600	1-216-066-00	RES-CHIP	5.1K	5%	1/10W
R601	1-216-073-00	RES-CHIP	10K	5%	1/10W
R602	1-216-073-00	RES-CHIP	10K	5%	1/10W
R603	1-216-073-00	RES-CHIP	10K	5%	1/10W
R604	1-216-033-00	RES-CHIP	220	5%	1/10W
R605	1-216-295-91	SHORT	0		
R608	1-216-295-91	SHORT	0		
R609	1-216-073-00	RES-CHIP	10K	5%	1/10W
R610	1-216-033-00	RES-CHIP	220	5%	1/10W
R611	1-216-073-00	RES-CHIP	10K	5%	1/10W
R612	1-216-073-00	RES-CHIP	10K	5%	1/10W
R613	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R615	1-216-089-91	RES-CHIP	47K	5%	1/10W
R616	1-216-073-00	RES-CHIP	10K	5%	1/10W
R617	1-216-295-91	SHORT	0		
R619	1-216-073-00	RES-CHIP	10K	5%	1/10W
R621	1-216-295-91	SHORT	0		
R622	1-216-295-91	SHORT	0		
R623	1-216-295-91	SHORT	0		
R624	1-216-295-91	SHORT	0		
R625	1-216-295-91	SHORT	0		
R626	1-216-073-00	RES-CHIP	10K	5%	1/10W
R628	1-216-295-91	SHORT	0		
R629	1-216-073-00	RES-CHIP	10K	5%	1/10W
R631	1-216-295-91	SHORT	0		
R634	1-216-295-91	SHORT	0		
R635	1-216-295-91	SHORT	0		
R638	1-216-295-91	SHORT	0		

REF.NO.	PART NO.	DESCRIPTION			REMARK
R639	1-216-017-91	RES-CHIP	47	5%	1/10W
R640	1-216-009-91	RES-CHIP	22	5%	1/10W
R642	1-216-295-91	SHORT	0		
R643	1-216-295-91	SHORT	0		
R645	1-216-295-91	SHORT	0		
R651	1-216-295-91	SHORT	0		
R653	1-216-025-91	RES-CHIP	100	5%	1/10W
R654	1-216-033-00	RES-CHIP	220	5%	1/10W
R655	1-216-295-91	SHORT	0		
R657	1-216-009-91	RES-CHIP	22	5%	1/10W
R658	1-216-049-91	RES-CHIP	1K	5%	1/10W
R659	1-216-025-91	RES-CHIP	100	5%	1/10W
R660	1-216-025-91	RES-CHIP	100	5%	1/10W
R661	1-216-025-91	RES-CHIP	100	5%	1/10W
R664	1-216-009-91	RES-CHIP	22	5%	1/10W
R665	1-216-035-00	RES-CHIP	270	5%	1/10W
R666	1-216-646-11	METAL CHIP	620	0.5%	1/10W
R667	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R668	1-216-009-91	RES-CHIP	22	5%	1/10W
R670	1-216-295-91	SHORT	0		
R671	1-216-073-00	RES-CHIP	10K	5%	1/10W
R672	1-216-073-00	RES-CHIP	10K	5%	1/10W
R673	1-216-073-00	RES-CHIP	10K	5%	1/10W
R674	1-216-073-00	RES-CHIP	10K	5%	1/10W
R675	1-216-073-00	RES-CHIP	10K	5%	1/10W
R676	1-216-073-00	RES-CHIP	10K	5%	1/10W
R677	1-216-073-00	RES-CHIP	10K	5%	1/10W
R678	1-216-073-00	RES-CHIP	10K	5%	1/10W
R679	1-216-073-00	RES-CHIP	10K	5%	1/10W
R680	1-216-073-00	RES-CHIP	10K	5%	1/10W
R681	1-216-073-00	RES-CHIP	10K	5%	1/10W
R682	1-216-073-00	RES-CHIP	10K	5%	1/10W
R683	1-216-073-00	RES-CHIP	10K	5%	1/10W
R684	1-216-073-00	RES-CHIP	10K	5%	1/10W
R685	1-216-073-00	RES-CHIP	10K	5%	1/10W
R686	1-216-073-00	RES-CHIP	10K	5%	1/10W
R687	1-216-295-91	SHORT	0		
R688	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R689	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R690	1-216-295-91	SHORT	0		
R691	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R692	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R693	1-216-009-91	RES-CHIP	22	5%	1/10W
R694	1-216-295-91	SHORT	0		
R695	1-216-047-91	RES-CHIP	820	5%	1/10W
R696	1-216-049-91	RES-CHIP	1K	5%	1/10W
R697	1-216-117-00	RES-CHIP	680K	5%	1/10W
R698	1-216-117-00	RES-CHIP	680K	5%	1/10W
R699	1-216-295-91	SHORT	0		
R801	1-216-009-91	RES-CHIP	22	5%	1/10W
R802	1-216-009-91	RES-CHIP	22	5%	1/10W
R804	1-216-073-00	RES-CHIP	10K	5%	1/10W
R806	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R807	1-208-768-11	METAL CHIP	270	0.5%	1/10W
R812	1-216-073-00	RES-CHIP	10K	5%	1/10W
R813	1-216-295-91	SHORT	0		
R814	1-216-073-00	RES-CHIP	10K	5%	1/10W
R815	1-216-073-00	RES-CHIP	10K	5%	1/10W
R816	1-216-073-00	RES-CHIP	10K	5%	1/10W
R817	1-211-962-11	METAL CHIP	27	0.5%	1/10W
R819	1-216-295-91	SHORT	0		
R820	1-216-295-91	SHORT	0		
R823	1-216-073-00	RES-CHIP	10K	5%	1/10W
R824	1-216-073-00	RES-CHIP	10K	5%	1/10W
R825	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R826	1-208-772-11	METAL CHIP	390	0.5%	1/10W
R827	1-216-607-11	METAL CHIP	15	0.5%	1/10W
R834	1-208-760-11	METAL CHIP	120	0.5%	1/10W
R835	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R836	1-211-960-11	METAL CHIP	22	0.5%	1/10W
R838	1-216-295-91	SHORT	0		
R840	1-216-295-91	SHORT	0		
R844	1-216-009-91	RES-CHIP	22	5%	1/10W
R845	1-216-009-91	RES-CHIP	22	5%	1/10W
R846	1-216-009-91	RES-CHIP	22	5%	1/10W
R847	1-216-009-91	RES-CHIP	22	5%	1/10W
R848	1-216-009-91	RES-CHIP	22	5%	1/10W
R849	1-216-009-91	RES-CHIP	22	5%	1/10W
R850	1-216-009-91	RES-CHIP	22	5%	1/10W
R851	1-216-009-91	RES-CHIP	22	5%	1/10W
R852	1-216-009-91	RES-CHIP	22	5%	1/10W
R853	1-216-009-91	RES-CHIP	22	5%	1/10W
R854	1-216-009-91	RES-CHIP	22	5%	1/10W
R855	1-216-009-91	RES-CHIP	22	5%	1/10W
R856	1-216-009-91	RES-CHIP	22	5%	1/10W
R857	1-216-009-91	RES-CHIP	22	5%	1/10W
R858	1-216-009-91	RES-CHIP	22	5%	1/10W
R859	1-216-009-91	RES-CHIP	22	5%	1/10W
R860	1-216-009-91	RES-CHIP	22	5%	1/10W
R861	1-216-009-91	RES-CHIP	22	5%	1/10W
R862	1-216-009-91	RES-CHIP	22	5%	1/10W
R863	1-216-009-91	RES-CHIP	22	5%	1/10W
R864	1-216-009-91	RES-CHIP	22	5%	1/10W
R865	1-216-009-91	RES-CHIP	22	5%	1/10W
R866	1-216-009-91	RES-CHIP	22	5%	1/10W
R867	1-216-009-91	RES-CHIP	22	5%	1/10W
R868	1-216-009-91	RES-CHIP	22	5%	1/10W
R869	1-216-009-91	RES-CHIP	22	5%	1/10W
R870	1-216-009-91	RES-CHIP	22	5%	1/10W
R871	1-216-009-91	RES-CHIP	22	5%	1/10W
R872	1-216-009-91	RES-CHIP	22	5%	1/10W
R873	1-216-009-91	RES-CHIP	22	5%	1/10W
R874	1-216-009-91	RES-CHIP	22	5%	1/10W
R875	1-216-009-91	RES-CHIP	22	5%	1/10W
R876	1-216-009-91	RES-CHIP	22	5%	1/10W
R877	1-216-009-91	RES-CHIP	22	5%	1/10W
R878	1-216-009-91	RES-CHIP	22	5%	1/10W
R879	1-216-009-91	RES-CHIP	22	5%	1/10W
R880	1-216-009-91	RES-CHIP	22	5%	1/10W
R881	1-216-009-91	RES-CHIP	22	5%	1/10W
R882	1-216-009-91	RES-CHIP	22	5%	1/10W
R883	1-216-009-91	RES-CHIP	22	5%	1/10W

B3

REF.NO.	PART NO.	DESCRIPTION			REMARK
R884	1-216-009-91	RES-CHIP	22	5%	1/10W
R885	1-216-009-91	RES-CHIP	22	5%	1/10W
R886	1-216-009-91	RES-CHIP	22	5%	1/10W
R887	1-216-009-91	RES-CHIP	22	5%	1/10W
R888	1-216-009-91	RES-CHIP	22	5%	1/10W
R889	1-216-009-91	RES-CHIP	22	5%	1/10W
R890	1-216-009-91	RES-CHIP	22	5%	1/10W
R891	1-216-009-91	RES-CHIP	22	5%	1/10W
R892	1-216-009-91	RES-CHIP	22	5%	1/10W
R893	1-216-009-91	RES-CHIP	22	5%	1/10W
R894	1-216-009-91	RES-CHIP	22	5%	1/10W
R895	1-216-009-91	RES-CHIP	22	5%	1/10W
R896	1-216-009-91	RES-CHIP	22	5%	1/10W
R897	1-216-009-91	RES-CHIP	22	5%	1/10W
R898	1-216-009-91	RES-CHIP	22	5%	1/10W
R899	1-216-073-00	RES-CHIP	10K	5%	1/10W
R901	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R902	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R903	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R904	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R905	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R906	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R907	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R908	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R909	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R910	1-216-049-91	RES-CHIP	1K	5%	1/10W
R911	1-216-049-91	RES-CHIP	1K	5%	1/10W
R912	1-216-049-91	RES-CHIP	1K	5%	1/10W
R914	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R916	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R923	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R926	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R927	1-216-295-91	SHORT	0		
R929	1-216-025-91	RES-CHIP	100	5%	1/10W
R930	1-216-025-91	RES-CHIP	100	5%	1/10W
R931	1-216-041-00	RES-CHIP	470	5%	1/10W
R933	1-216-025-91	RES-CHIP	100	5%	1/10W
R934	1-216-025-91	RES-CHIP	100	5%	1/10W
R935	1-216-073-00	RES-CHIP	10K	5%	1/10W
R936	1-216-041-00	RES-CHIP	470	5%	1/10W
R937	1-216-025-91	RES-CHIP	100	5%	1/10W
R938	1-216-025-91	RES-CHIP	100	5%	1/10W
R939	1-216-295-91	SHORT	0		
R940	1-216-295-91	SHORT	0		
R941	1-216-295-91	SHORT	0		
R942	1-216-037-00	RES-CHIP	330	5%	1/10W
R943	1-216-033-00	RES-CHIP	220	5%	1/10W
R944	1-216-295-91	SHORT	0		
R945	1-216-295-91	SHORT	0		
R951	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R952	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R953	1-216-295-91	SHORT	0		
R954	1-216-295-91	SHORT	0		
R955	1-216-295-91	SHORT	0		
R956	1-216-089-91	RES-CHIP	47K	5%	1/10W
R957	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R958	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R959	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R960	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R961	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R962	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R979	1-216-295-91	SHORT	0		
R981	1-216-037-00	RES-CHIP	330	5%	1/10W
R982	1-216-037-00	RES-CHIP	330	5%	1/10W
R983	1-216-089-91	RES-CHIP	47K	5%	1/10W
R984	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R985	1-216-113-00	RES-CHIP	470K	5%	1/10W
R986	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R987	1-216-049-91	RES-CHIP	1K	5%	1/10W
R988	1-216-033-00	RES-CHIP	220	5%	1/10W
R989	1-216-081-00	RES-CHIP	22K	5%	1/10W
R990	1-216-113-00	RES-CHIP	470K	5%	1/10W
R991	1-216-295-91	SHORT	0		
R993	1-216-089-91	RES-CHIP	47K	5%	1/10W
R994	1-216-033-00	RES-CHIP	220	5%	1/10W
R995	1-216-033-00	RES-CHIP	220	5%	1/10W
R996	1-216-037-00	RES-CHIP	330	5%	1/10W
R997	1-216-037-00	RES-CHIP	330	5%	1/10W
R998	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2801	1-208-760-11	METAL CHIP	120	0.5%	1/10W
R2802	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R2803	1-216-603-11	METAL CHIP	10	0.5%	1/10W
R2804	1-208-758-11	METAL CHIP	100	0.5%	1/10W
R2805	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R2806	1-211-960-11	METAL CHIP	22	0.5%	1/10W
R2809	1-216-295-91	SHORT	0		
R2810	1-216-295-91	SHORT	0		
R2813	1-216-295-91	SHORT	0		
R2815	1-216-295-91	SHORT	0		
R2817	1-216-295-91	SHORT	0		
R2818	1-216-295-91	SHORT	0		
R2820	1-216-295-91	SHORT	0		
R2822	1-216-295-91	SHORT	0		

<NETWORK RESISTOR>

RB001	1-239-409-11	NETWORK RESISTOR (CHIP) 47
RB002	1-239-409-11	NETWORK RESISTOR (CHIP) 47
RB003	1-239-409-11	NETWORK RESISTOR (CHIP) 47
RB004	1-239-409-11	NETWORK RESISTOR (CHIP) 47
RB005	1-239-409-11	NETWORK RESISTOR (CHIP) 47
RB006	1-239-409-11	NETWORK RESISTOR (CHIP) 47
RB007	1-239-414-11	NETWORK RESISTOR (CHIP) 150
RB008	1-239-414-11	NETWORK RESISTOR (CHIP) 150
RB009	1-239-414-11	NETWORK RESISTOR (CHIP) 150
RB010	1-239-414-11	NETWORK RESISTOR (CHIP) 150
RB011	1-239-414-11	NETWORK RESISTOR (CHIP) 150
RB012	1-239-414-11	NETWORK RESISTOR (CHIP) 150
RB013	1-239-621-11	NETWORK RESISTOR (CHIP) 22
RB014	1-239-621-11	NETWORK RESISTOR (CHIP) 22
RB015	1-239-621-11	NETWORK RESISTOR (CHIP) 22
RB016	1-239-621-11	NETWORK RESISTOR (CHIP) 22

REF.NO.	PART NO.	DESCRIPTION	REMARK
RB017	1-239-621-11	NETWORK RESISTOR (CHIP) 22	
RB018	1-239-621-11	NETWORK RESISTOR (CHIP) 22	
RB019	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB020	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB021	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB022	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB023	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB024	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB025	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB026	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB027	1-239-409-11	NETWORK RESISTOR (CHIP) 47	
RB301	1-239-621-11	NETWORK RESISTOR (CHIP) 22	
RB302	1-239-621-11	NETWORK RESISTOR (CHIP) 22	
RB701	1-239-711-91	NETWORK RESISTOR (CHIP) 0	
RB702	1-239-711-91	NETWORK RESISTOR (CHIP) 0	
RB703	1-239-711-91	NETWORK RESISTOR (CHIP) 0	
RB704	1-239-711-91	NETWORK RESISTOR (CHIP) 0	
RB705	1-239-711-91	NETWORK RESISTOR (CHIP) 0	
RB706	1-239-711-91	NETWORK RESISTOR (CHIP) 0	
		<CRYSTAL>	
X801	1-781-649-21	OSCILLATOR, CRYSTAL (54MHz)	
X802	1-781-650-21	VIBRATOR, CRYSTAL (17.28MHz)	
X901	1-760-014-11	VIBRATOR, CERAMIC (20MHz)	
**********			
*	A-1299-176-A	A1 BOARD, COMPLETE **********	
*	1-555-110-00	CABLE, PIN	
	4-382-854-11	SCREW (M3X10), P, SW (+) (IC1601, IC1602, IC1603, IC1604, IC1605)	
	4-389-026-11	SHEET, BN (IC1604)	
		<COMFILTER MODULE>	
BC4	1-772-694-11	3D COMFILTER MODULE, DIGITAL	
		<CAPACITOR>	
C1101	1-126-935-11	ELECT 470µF 20% 16V	
C1102	1-126-964-11	ELECT 10µF 20% 50V	
C1103	1-126-960-11	ELECT 1µF 20% 50V	
C1104	1-126-960-11	ELECT 1µF 20% 50V	
C1105	1-126-041-11	ELECT 2200µF 20% 35V	
C1106	1-136-165-00	MYLAR 0.1µF 5% 50V	
C1107	1-136-165-00	MYLAR 0.1µF 5% 50V	
C1108	1-104-664-11	ELECT 47µF 20% 16V	
C1109	1-104-664-11	ELECT 47µF 20% 16V	
C1110	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1111	1-126-041-11	ELECT 2200µF 20% 35V	
C1114	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1116	1-126-933-11	ELECT 100µF 20% 16V	
C1117	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1201	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1202	1-126-934-11	ELECT 220µF 20% 16V	
C1203	1-126-965-11	ELECT 22µF 20% 50V	
C1204	1-115-419-11	CERAMIC CHIP 3300pF 5% 25V	
C1205	1-115-419-11	CERAMIC CHIP 3300pF 5% 25V	
C1206	1-164-492-11	CERAMIC CHIP 0.15µF 10% 16V	
C1208	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1209	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C1210	1-164-492-11	CERAMIC CHIP 0.15µF 10% 16V	
C1211	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C1213	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1215	1-164-505-11	CERAMIC CHIP 2.2µF 16V	
C1217	1-164-505-11	CERAMIC CHIP 2.2µF 16V	
C1219	1-163-251-11	CERAMIC CHIP 100pF 5% 50V	
C1220	1-107-715-11	ELECT 22µF 20% 16V	
C1221	1-137-150-11	MYLAR 0.01µF 5% 50V	
C1222	1-126-962-11	ELECT 3.3µF 20% 50V	
C1223	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1224	1-126-933-11	ELECT 100µF 20% 16V	
C1225	1-126-933-11	ELECT 100µF 20% 16V	
C1226	1-126-933-11	ELECT 100µF 20% 16V	
C1227	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1228	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1229	1-126-767-11	ELECT 1000µF 20% 16V	
C1230	1-126-933-11	ELECT 100µF 20% 16V	
C1231	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1310	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C1311	1-163-251-11	CERAMIC CHIP 100pF 5% 50V	
C1312	1-104-664-11	ELECT 47µF 20% 16V	
C1314	1-126-933-11	ELECT 100µF 20% 16V	
C1315	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1316	1-126-933-11	ELECT 100µF 20% 16V	
C1317	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1321	1-126-933-11	ELECT 100µF 20% 16V	
C1323	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1324	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1325	1-126-933-11	ELECT 100µF 20% 16V	
C1326	1-126-933-11	ELECT 100µF 20% 16V	
C1327	1-104-665-11	ELECT 100µF 20% 25V	
C1328	1-126-967-11	ELECT 47µF 20% 50V	
C1329	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1330	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1331	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1332	1-126-967-11	ELECT 47µF 20% 50V	
C1333	1-104-665-11	ELECT 100µF 20% 25V	
C1334	1-126-933-11	ELECT 100µF 20% 16V	
C1335	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1336	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1337	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C1401	1-164-346-11	CERAMIC CHIP 1µF 16V	
C1601	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1602	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1603	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1604	1-126-933-11	ELECT 100µF 20% 16V	
C1605	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1606	1-126-933-11	ELECT 100µF 20% 16V	
C1607	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1608	1-126-933-11	ELECT 100µF 20% 16V	
C1610	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	

A1

REF.NO.	PART NO.	DESCRIPTION	REMARK
C1611	1-126-916-11	ELECT 1000µF 20% 6.3V	
C1612	1-126-925-11	ELECT 470µF 20% 10V	
C1615	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1616	1-126-916-11	ELECT 1000µF 20% 6.3V	
C1617	1-126-925-11	ELECT 470µF 20% 10V	
C1619	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
		<CONNECTOR>	
CN1001	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN1102 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN1201	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN1301 *	1-564-508-11	PLUG, CONNECTOR 5P	
CN1302 *	1-764-333-11	PLUG, CONNECTOR 10P	
CN1404	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN1501	1-785-802-11	PIN, CONNECTOR (WITH PWB) 20P	
CN1502	1-785-802-11	PIN, CONNECTOR (WITH PWB) 20P	
CN1503 *	1-564-511-11	PLUG, CONNECTOR 8P	
CN1504 *	1-564-508-11	PLUG, CONNECTOR 5P	
CN1603 *	1-764-333-11	PLUG, CONNECTOR 10P	
CN1605 *	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN1606 *	1-564-508-11	PLUG, CONNECTOR 5P	
CN1661	1-695-915-11	TAB (CONTACT)	
CN1665	1-695-915-11	TAB (CONTACT)	
CN1666	1-695-915-11	TAB (CONTACT)	
CN1801	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
		<COMPOSITION CIRCUIT BLOCK>	
CP1302	1-251-658-31	SPLITTER RF	
		<DIODE>	
D1101	8-719-988-61	DIODE 1SS355TE-17	
D1102	8-719-988-61	DIODE 1SS355TE-17	
D1103	8-719-988-61	DIODE 1SS355TE-17	
D1104	8-719-988-61	DIODE 1SS355TE-17	
D1105	8-719-914-43	DIODE DAN202K	
D1106	8-719-914-43	DIODE DAN202K	
D1107	8-719-402-92	DIODE MA3220M-TX	
D1108	8-719-988-61	DIODE 1SS355TE-17	
D1109	8-719-988-61	DIODE 1SS355TE-17	
D1110	8-719-402-92	DIODE MA3220M-TX	
D1111	8-719-402-92	DIODE MA3220M-TX	
D1112	8-719-402-92	DIODE MA3220M-TX	
D1201	8-719-988-61	DIODE 1SS355TE-17	
D1202	8-719-914-43	DIODE DAN202K	
D1204	8-719-914-43	DIODE DAN202K	
D1205	8-719-988-61	DIODE 1SS355TE-17	
D1206	8-719-056-72	DIODE UDZ-TE-17-2.4B	
D1301	8-719-073-01	DIODE MA111-(K8).S0	
D1401	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D1402	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D1403	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D1404	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D1405	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D1406	8-719-914-43	DIODE DAN202K	
D1409	8-719-422-12	DIODE MA8039	
D1410	8-719-402-92	DIODE MA3220M-TX	
D1411	8-719-402-92	DIODE MA3220M-TX	
D1412	8-719-988-61	DIODE 1SS355TE-17	
		<FERRITBEAD>	
FB1301	1-216-295-91	SHORT 0	
		<IC>	
IC1101	8-759-190-89	IC TDA7265	
IC1201	8-759-273-12	IC TDA7315D013TR	
IC1202	8-759-576-76	IC TDA2822D013TR	
IC1301	8-759-042-02	IC S-80743AL-A7-S	
IC1601	8-759-069-28	IC PQ05RF11	
IC1602	8-759-095-63	IC PQ09RF2	
IC1603	8-759-520-49	IC PQ30RV21	
IC1604	8-759-644-37	IC PQ5EV3	
IC1605	8-759-069-28	IC PQ05RF11	
		<CHIP CONDUCTOR>	
JR1001	1-216-295-91	SHORT 0	
JR1002	1-216-295-91	SHORT 0	
JR1003	1-216-295-91	SHORT 0	
JR1004	1-216-295-91	SHORT 0	
JR1005	1-216-295-91	SHORT 0	
JR1006	1-216-295-91	SHORT 0	
JR1007	1-216-295-91	SHORT 0	
JR1008	1-216-295-91	SHORT 0	
JR1009	1-216-295-91	SHORT 0	
JR1010	1-216-295-91	SHORT 0	
JR1011	1-216-295-91	SHORT 0	
JR1013	1-216-295-91	SHORT 0	
JR1014	1-216-295-91	SHORT 0	
JR1015	1-216-295-91	SHORT 0	
JR1016	1-216-295-91	SHORT 0	
JR1017	1-216-295-91	SHORT 0	
JR1018	1-216-295-91	SHORT 0	
JR1019	1-216-295-91	SHORT 0	
JR1020	1-216-295-91	SHORT 0	
JR1023	1-216-295-91	SHORT 0	
JR1028	1-216-295-91	SHORT 0	
JR1031	1-216-295-91	SHORT 0	
JR1032	1-216-295-91	SHORT 0	
JR1033	1-216-295-91	SHORT 0	
JR1034	1-216-295-91	SHORT 0	
JR1035	1-216-295-91	SHORT 0	
JR1201	1-216-295-91	SHORT 0	
JR1202	1-216-295-91	SHORT 0	
JR1303	1-216-295-91	SHORT 0	
JR1305	1-216-295-91	SHORT 0	
JR1306	1-216-295-91	SHORT 0	
JR1601	1-216-295-91	SHORT 0	

REF.NO.	PART NO.	DESCRIPTION			REMARK
JR1603	1-216-295-91	SHORT	0		
JR1604	1-414-193-41	INDUCTOR	220µH		
		<COIL>			
L1304	1-414-856-11	INDUCTOR	10µH		
L1305	1-414-856-11	INDUCTOR	10µH		
L1306	1-414-856-11	INDUCTOR	10µH		
L1307	1-414-856-11	INDUCTOR	10µH		
L1308	1-414-856-11	INDUCTOR	10µH		
L1309	1-414-856-11	INDUCTOR	10µH		
L1310	1-414-856-11	INDUCTOR	10µH		
L1311	1-414-856-11	INDUCTOR	10µH		
L1312	1-414-856-11	INDUCTOR	10µH		
L1313	1-414-856-11	INDUCTOR	10µH		
L1314	1-414-856-11	INDUCTOR	10µH		
		<TRANSISTOR>			
Q1101	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1102	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1103	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1104	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1105	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1106	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1201	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1202	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1203	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1204	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1205	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1206	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1207	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1208	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1209	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1308	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1309	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1310	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1311	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1312	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1401	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
Q1402	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1409	8-729-026-49	TRANSISTOR	2SA1037AK-T-146-R		
		<RESISTOR>			
R1101	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1102	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1103	1-249-377-11	CARBON	0.47	5%	1/4W
R1104	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1105	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1106	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1107	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1108	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1109	1-216-041-00	RES-CHIP	470	5%	1/10W
R1110	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1111	1-216-041-00	RES-CHIP	470	5%	1/10W
R1112	1-216-295-91	SHORT	0		
R1113	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1114	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1115	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1116	1-216-295-91	SHORT	0		
R1117	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1118	1-216-079-00	RES-CHIP	18K	5%	1/10W
R1119	1-216-079-00	RES-CHIP	18K	5%	1/10W
R1120	1-216-043-91	RES-CHIP	560	5%	1/10W
R1121	1-216-043-91	RES-CHIP	560	5%	1/10W
R1122	1-216-357-00	METAL OXIDE	4.7	5%	1W
R1123	1-249-381-11	CARBON	1	5%	1/4W
R1124	1-216-357-00	METAL OXIDE	4.7	5%	1W
R1126	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1127	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1128	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1130	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1131	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1201	1-216-033-00	RES-CHIP	220	5%	1/10W
R1202	1-216-033-00	RES-CHIP	220	5%	1/10W
R1203	1-216-033-00	RES-CHIP	220	5%	1/10W
R1204	1-216-033-00	RES-CHIP	220	5%	1/10W
R1206	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1207	1-216-295-91	SHORT	0		
R1209	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1210	1-216-295-91	SHORT	0		
R1211	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1212	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1213	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1214	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1215	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1216	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1217	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1218	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1219	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1220	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1221	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1222	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1223	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1224	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1225	1-216-033-00	RES-CHIP	220	5%	1/10W
R1226	1-216-033-00	RES-CHIP	220	5%	1/10W
R1228	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1229	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1230	1-216-308-00	RES-CHIP	4.7	5%	1/10W
R1231	1-216-295-91	SHORT	0		
R1232	1-216-295-91	SHORT	0		
R1233	1-216-295-91	SHORT	0		
R1234	1-216-295-91	SHORT	0		
R1235	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1236	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1237	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1249	1-216-308-00	RES-CHIP	4.7	5%	1/10W
R1329	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1330	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1331	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A1 M1

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1332	1-216-043-91	RES-CHIP	560	5%	1/10W
R1333	1-216-039-00	RES-CHIP	390	5%	1/10W
R1334	1-216-025-91	RES-CHIP	100	5%	1/10W
R1335	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1336	1-216-025-91	RES-CHIP	100	5%	1/10W
R1337	1-216-017-91	RES-CHIP	47	5%	1/10W
R1338	1-216-295-91	SHORT	0		
R1341	1-216-025-91	RES-CHIP	100	5%	1/10W
R1342	1-216-295-91	SHORT	0		
R1344	1-216-043-91	RES-CHIP	560	5%	1/10W
R1345	1-216-039-00	RES-CHIP	390	5%	1/10W
R1346	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1347	1-216-025-91	RES-CHIP	100	5%	1/10W
R1348	1-216-025-91	RES-CHIP	100	5%	1/10W
R1349	1-216-025-91	RES-CHIP	100	5%	1/10W
R1350	1-216-025-91	RES-CHIP	100	5%	1/10W
R1351	1-216-017-91	RES-CHIP	47	5%	1/10W
R1352	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1402	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1403	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1404	1-216-025-91	RES-CHIP	100	5%	1/10W
R1405	1-208-826-11	METAL CHIP	68K	0.5%	1/10W
R1406	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R1407	1-208-817-11	METAL CHIP	30K	0.5%	1/10W
R1408	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R1409	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1436	1-216-295-91	SHORT	0		
R1437	1-216-295-91	SHORT	0		
R1438	1-216-295-91	SHORT	0		
R1439	1-216-295-91	SHORT	0		
R1440	1-216-295-91	SHORT	0		
R1441	1-216-295-91	SHORT	0		
R1452	1-216-295-91	SHORT	0		
R1453	1-216-295-91	SHORT	0		
R1460	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1461	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1462	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1601	1-216-295-91	SHORT	0		
R1608	1-208-778-11	METAL CHIP	680	0.5%	1/10W
R1610	1-208-772-11	METAL CHIP	390	0.5%	1/10W
R1611	1-208-772-11	METAL CHIP	390	0.5%	1/10W
R1613	1-208-772-11	METAL CHIP	390	0.5%	1/10W
		<RELAY>			
RY1101	1-755-028-11	RELAY			
RY1102	1-755-028-11	RELAY			
		<TUNER>			
TU1303⚠	8-598-508-10	TUNER, FSS BTF-LG436			
TU1304⚠	8-598-452-20	TUNER, FSS BTF-WG442			

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REF.NO.	PART NO.	DESCRIPTION			REMARK
*	A-1306-588-A	M1 BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C001	1-126-960-11	ELECT	1µF	20%	50V
C002	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C003	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C004	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C007	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C010	1-126-933-11	ELECT	100µF	20%	16V
C013	1-163-989-11	CERAMIC CHIP	0.033µF	10%	25V
C014	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C015	1-163-239-11	CERAMIC CHIP	33pF	5%	50V
C016	1-163-239-11	CERAMIC CHIP	33pF	5%	50V
C017	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C018	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C019	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C020	1-163-245-11	CERAMIC CHIP	56pF	5%	50V
C021	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C022	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C023	1-126-967-11	ELECT	47µF	20%	50V
C024	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C025	1-126-933-11	ELECT	100µF	20%	16V
C026	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C027	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C028	1-126-933-11	ELECT	100µF	20%	16V
C030	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C032	1-126-933-11	ELECT	100µF	20%	16V
C033	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C034	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C035	1-163-001-11	CERAMIC CHIP	220pF	10%	50V
C036	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C037	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C038	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C039	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C040	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C041	1-163-001-11	CERAMIC CHIP	220pF	10%	50V
C042	1-163-001-11	CERAMIC CHIP	220pF	10%	50V
C043	1-126-933-11	ELECT	100µF	20%	16V
C045	1-104-665-11	ELECT	100µF	20%	25V
C046	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C048	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C049	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C050	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C051	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C052	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C054	1-126-933-11	ELECT	100µF	20%	16V
C055	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C056	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C059	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C060	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C061	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C062	1-163-259-91	CERAMIC CHIP	220pF	5%	50V

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
CN001	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
		<DIODE>	
D003	8-719-988-61	DIODE 1SS355TE-17	
D004	8-719-988-61	DIODE 1SS355TE-17	
D007	8-719-988-61	DIODE 1SS355TE-17	
D008	8-719-988-61	DIODE 1SS355TE-17	
D009	8-719-988-61	DIODE 1SS355TE-17	
D015	8-719-988-61	DIODE 1SS355TE-17	
D017	8-719-988-61	DIODE 1SS355TE-17	
		<FERRITBEAD>	
FB001	1-414-233-22	INDUCTOR CHIP 0µH	
FB002	1-414-233-22	INDUCTOR CHIP 0µH	
FB003	1-414-233-22	INDUCTOR CHIP 0µH	
FB004	1-414-233-22	INDUCTOR CHIP 0µH	
FB005	1-414-233-22	INDUCTOR CHIP 0µH	
FB006	1-414-233-22	INDUCTOR CHIP 0µH	
FB007	1-414-233-22	INDUCTOR CHIP 0µH	
FB008	1-414-233-22	INDUCTOR CHIP 0µH	
FB009	1-414-233-22	INDUCTOR CHIP 0µH	
FB010	1-414-233-22	INDUCTOR CHIP 0µH	
FB011	1-414-233-22	INDUCTOR CHIP 0µH	
FB012	1-414-233-22	INDUCTOR CHIP 0µH	
		<FILTER>	
FL001	1-236-071-11	ENCAPSULATED COMPONENT	
		<IC>	
IC001	8-759-042-02	IC S-80743AL-A7-S	
IC002	8-752-916-27	IC CXP750096-025Q-TL	
IC003	8-759-652-13	IC SDA5254-2B006	
IC004	8-759-675-64	IC M24C08-MN6T(A)	
IC005	8-759-671-94	IC MC74HC4053AFEL	
IC006	8-759-575-71	IC M24C04-WMN6T	
IC007	8-759-042-02	IC S-80743AL-A7-S	
IC008	8-759-242-68	IC TC7W32F	
IC009	8-759-242-78	IC TC7W02F	
IC010	8-759-242-74	IC TC7W04F	
		<CHIP CONDUCTOR>	
JR001	1-216-295-91	SHORT 0	
JR002	1-216-295-91	SHORT 0	
		<COIL>	
L002	1-408-591-11	INDUCTOR 1µH	
L003	1-408-603-31	INDUCTOR 10µH	
L004	1-408-603-31	INDUCTOR 10µH	
L005	1-408-602-31	INDUCTOR 8.2µH	
L006	1-408-603-31	INDUCTOR 10µH	
		<TRANSISTOR>	
Q004	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q005	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q006	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q008	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q009	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q010	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q014	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q015	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q016	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q017	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q018	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q019	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q020	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q021	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q022	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q023	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<RESISTOR>	
R001	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R002	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R003	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R004	1-216-025-91	RES-CHIP 100 5% 1/10W	
R005	1-216-025-91	RES-CHIP 100 5% 1/10W	
R006	1-216-025-91	RES-CHIP 100 5% 1/10W	
R007	1-216-025-91	RES-CHIP 100 5% 1/10W	
R008	1-216-025-91	RES-CHIP 100 5% 1/10W	
R009	1-216-025-91	RES-CHIP 100 5% 1/10W	
R011	1-216-025-91	RES-CHIP 100 5% 1/10W	
R012	1-216-025-91	RES-CHIP 100 5% 1/10W	
R013	1-216-025-91	RES-CHIP 100 5% 1/10W	
R015	1-216-295-91	SHORT 0	
R021	1-216-025-91	RES-CHIP 100 5% 1/10W	
R022	1-216-025-91	RES-CHIP 100 5% 1/10W	
R023	1-216-025-91	RES-CHIP 100 5% 1/10W	
R024	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R026	1-216-025-91	RES-CHIP 100 5% 1/10W	
R027	1-216-033-00	RES-CHIP 220 5% 1/10W	
R030	1-216-025-91	RES-CHIP 100 5% 1/10W	
R031	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R032	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R033	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R034	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R035	1-208-792-11	METAL CHIP 2.7K 0.5% 1/10W	
R036	1-216-025-91	RES-CHIP 100 5% 1/10W	
R037	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R038	1-216-025-91	RES-CHIP 100 5% 1/10W	
R039	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R040	1-216-025-91	RES-CHIP 100 5% 1/10W	
R042	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R043	1-216-033-00	RES-CHIP 220 5% 1/10W	
R044	1-216-045-00	RES-CHIP 680 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R047	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R048	1-216-049-91	RES-CHIP	1K	5%	1/10W
R049	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R050	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R051	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R052	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R053	1-216-045-00	RES-CHIP	680	5%	1/10W
R054	1-216-025-91	RES-CHIP	100	5%	1/10W
R055	1-216-025-91	RES-CHIP	100	5%	1/10W
R058	1-208-816-11	METAL CHIP	27K	0.5%	1/10W
R059	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R060	1-216-045-00	RES-CHIP	680	5%	1/10W
R061	1-216-025-91	RES-CHIP	100	5%	1/10W
R063	1-216-025-91	RES-CHIP	100	5%	1/10W
R064	1-216-025-91	RES-CHIP	100	5%	1/10W
R065	1-208-758-11	METAL CHIP	100	0.5%	1/10W
R067	1-208-758-11	METAL CHIP	100	0.5%	1/10W
R068	1-216-295-91	SHORT	0		
R069	1-208-758-11	METAL CHIP	100	0.5%	1/10W
R070	1-216-295-91	SHORT	0		
R071	1-216-295-91	SHORT	0		
R072	1-216-295-91	SHORT	0		
R073	1-216-025-91	RES-CHIP	100	5%	1/10W
R078	1-216-025-91	RES-CHIP	100	5%	1/10W
R079	1-216-025-91	RES-CHIP	100	5%	1/10W
R080	1-216-121-91	RES-CHIP	1M	5%	1/10W
R081	1-216-041-00	RES-CHIP	470	5%	1/10W
R082	1-216-089-91	RES-CHIP	47K	5%	1/10W
R083	1-216-049-91	RES-CHIP	1K	5%	1/10W
R085	1-216-037-00	RES-CHIP	330	5%	1/10W
R086	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R088	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R089	1-216-073-00	RES-CHIP	10K	5%	1/10W
R090	1-216-033-00	RES-CHIP	220	5%	1/10W
R091	1-216-033-00	RES-CHIP	220	5%	1/10W
R092	1-216-073-00	RES-CHIP	10K	5%	1/10W
R093	1-216-025-91	RES-CHIP	100	5%	1/10W
R094	1-216-025-91	RES-CHIP	100	5%	1/10W
R095	1-216-033-00	RES-CHIP	220	5%	1/10W
R099	1-216-295-91	SHORT	0		
R100	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R101	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R102	1-216-295-91	SHORT	0		
R103	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R104	1-216-295-91	SHORT	0		
R105	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R106	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R107	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R108	1-216-049-91	RES-CHIP	1K	5%	1/10W
R109	1-216-025-91	RES-CHIP	100	5%	1/10W
R110	1-216-049-91	RES-CHIP	1K	5%	1/10W
R111	1-216-025-91	RES-CHIP	100	5%	1/10W
R112	1-216-049-91	RES-CHIP	1K	5%	1/10W
R113	1-216-025-91	RES-CHIP	100	5%	1/10W
R114	1-216-049-91	RES-CHIP	1K	5%	1/10W
R119	1-216-295-91	SHORT	0		
R120	1-216-073-00	RES-CHIP	10K	5%	1/10W
R121	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R123	1-216-017-91	RES-CHIP	47	5%	1/10W
R124	1-216-025-91	RES-CHIP	100	5%	1/10W
R125	1-216-025-91	RES-CHIP	100	5%	1/10W
R126	1-216-049-91	RES-CHIP	1K	5%	1/10W
R127	1-216-049-91	RES-CHIP	1K	5%	1/10W
R128	1-216-049-91	RES-CHIP	1K	5%	1/10W
R129	1-216-049-91	RES-CHIP	1K	5%	1/10W
R131	1-216-073-00	RES-CHIP	10K	5%	1/10W
R132	1-216-049-91	RES-CHIP	1K	5%	1/10W
R133	1-216-025-91	RES-CHIP	100	5%	1/10W
R134	1-216-041-00	RES-CHIP	470	5%	1/10W
R135	1-216-025-91	RES-CHIP	100	5%	1/10W
R137	1-216-295-91	SHORT	0		
R138	1-216-041-00	RES-CHIP	470	5%	1/10W
R139	1-216-049-91	RES-CHIP	1K	5%	1/10W
R140	1-216-073-00	RES-CHIP	10K	5%	1/10W
R141	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R142	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R143	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R144	1-216-033-00	RES-CHIP	220	5%	1/10W
		<CRYSTAL>			
X001	1-567-928-11	VIBLATOR, CERAMIC (20MHz)			
X002	1-781-685-21	VIBRATOR, CRYSTAL (6MHz)			
**********					
	* A-1346-922-A	E BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C4301	1-126-960-11	ELECT	1µF	20%	50V
C4302	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C4303	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C4304	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4306	1-126-964-11	ELECT	10µF	20%	50V
C4307	1-163-137-00	CERAMIC CHIP	680pF	5%	50V
C4311	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4312	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4313	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4315	1-163-222-11	CERAMIC CHIP	5pF	0.25pF	50V
C4316	1-104-664-11	ELECT	47µF	20%	25V
C4317	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4318	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4319	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4324	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4325	1-163-093-00	CERAMIC CHIP	10pF	5%	50V
C4329	1-126-963-11	ELECT	4.7µF	20%	50V
C4330	1-137-581-11	FILM	0.1µF	5%	100V
C4331	1-126-959-11	ELECT	0.47µF	20%	50V
C4333	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4334	1-126-967-11	ELECT	47µF	20%	50V
C4336	1-126-967-11	ELECT	47µF	20%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C4338	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4340	1-126-967-11	ELECT	47µF	20%	50V
C4342	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C4343	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4344	1-126-960-11	ELECT	1µF	20%	50V
C4345	1-126-967-11	ELECT	47µF	20%	50V
C4346	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4347	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4348	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4349	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4350	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4351	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C4352	1-126-967-11	ELECT	47µF	20%	50V
C4353	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C4354	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C4355	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4356	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4357	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4358	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4359	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C4360	1-126-964-11	ELECT	10µF	20%	50V
C4362	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4363	1-126-967-11	ELECT	47µF	20%	50V
C4364	1-126-967-11	ELECT	47µF	20%	50V
C4368	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4369	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4370	1-126-967-11	ELECT	47µF	20%	50V
C4371	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4372	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C4373	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4374	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4377	1-126-960-11	ELECT	1µF	20%	50V
C4382	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4383	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4384	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C4601	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
		<CONNECTOR>			
CN4101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P			
CN4500 *	1-564-512-11	PLUG, CONNECTOR 9P			
CN4502 *	1-564-507-11	PLUG, CONNECTOR 4P			
		<DIODE>			
D4304	8-719-977-22	DIODE DTZ9.1			
D4305	8-719-977-22	DIODE DTZ9.1			
D4601	8-719-401-63	DIODE MA3062M-TX			
D4602	8-719-914-43	DIODE DAN202K			
D4603	8-719-914-43	DIODE DAN202K			
		<FERRITBEAD>			
FB4387	1-216-295-91	SHORT	0		
FB4388	1-216-295-91	SHORT	0		
FB4389	1-216-295-91	SHORT	0		

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<IC>			
IC4301	8-752-090-87	IC CXA2100AQ			
		<CHIP CONDUCTOR>			
JR4301	1-216-295-91	SHORT	0		
JR4302	1-216-037-00	RES-CHIP	330	5%	1/10W
		<COIL>			
L4301	1-412-029-11	INDUCTOR CHIP		10µH	
L4302	1-412-029-11	INDUCTOR CHIP		10µH	
L4303	1-412-029-11	INDUCTOR CHIP		10µH	
L4304	1-412-029-11	INDUCTOR CHIP		10µH	
L4305	1-412-029-11	INDUCTOR CHIP		10µH	
L4306	1-412-029-11	INDUCTOR CHIP		10µH	
L4308	1-412-031-11	INDUCTOR CHIP		47µH	
L4309	1-412-031-11	INDUCTOR CHIP		47µH	
		<TRANSISTOR>			
Q4301	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q4303	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4304	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4307	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4308	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4310	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4316	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4317	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4318	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4319	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q4320	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4321	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4322	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4323	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4324	8-729-216-22	TRANSISTOR 2SA1162-G			
Q4601	1-801-806-11	TRANSISTOR DTC144EKA			
Q4602	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R4301	1-216-025-91	RES-CHIP	100	5%	1/10W
R4302	1-216-025-91	RES-CHIP	100	5%	1/10W
R4303	1-216-025-91	RES-CHIP	100	5%	1/10W
R4304	1-216-025-91	RES-CHIP	100	5%	1/10W
R4305	1-216-025-91	RES-CHIP	100	5%	1/10W
R4306	1-216-045-00	RES-CHIP	680	5%	1/10W
R4307	1-216-295-91	SHORT	0		
R4309	1-216-295-91	SHORT	0		
R4313	1-216-033-00	RES-CHIP	220	5%	1/10W
R4314	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4315	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R4316	1-216-037-00	RES-CHIP	330	5%	1/10W
R4317	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4319	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4320	1-216-689-11	RES-CHIP	39K	5%	1/10W

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R4321	1-216-105-91	RES-CHIP	220K	5%	1/10W
R4322	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4323	1-216-091-00	RES-CHIP	56K	5%	1/10W
R4324	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R4325	1-216-093-91	RES-CHIP	68K	5%	1/10W
R4331	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4334	1-216-025-91	RES-CHIP	100	5%	1/10W
R4335	1-216-025-91	RES-CHIP	100	5%	1/10W
R4336	1-216-025-91	RES-CHIP	100	5%	1/10W
R4337	1-216-025-91	RES-CHIP	100	5%	1/10W
R4339	1-249-409-11	CARBON	220	5%	1/4W
R4340	1-216-111-00	RES-CHIP	390K	5%	1/10W
R4341	1-216-295-91	SHORT	0		
R4343	1-216-025-91	RES-CHIP	100	5%	1/10W
R4344	1-216-025-91	RES-CHIP	100	5%	1/10W
R4345	1-216-075-00	RES-CHIP	12K	5%	1/10W
R4346	1-208-812-11	METAL CHIP	18K	0.5%	1/10W
R4347	1-216-025-91	RES-CHIP	100	5%	1/10W
R4348	1-216-025-91	RES-CHIP	100	5%	1/10W
R4349	1-216-033-00	RES-CHIP	220	5%	1/10W
R4350	1-216-025-91	RES-CHIP	100	5%	1/10W
R4352	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4354	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R4355	1-216-295-91	SHORT	0		
R4357	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R4358	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R4359	1-216-041-00	RES-CHIP	470	5%	1/10W
R4360	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4361	1-216-133-00	RES-CHIP	3.3M	5%	1/10W
R4363	1-216-025-91	RES-CHIP	100	5%	1/10W
R4365	1-216-017-91	RES-CHIP	47	5%	1/10W
R4366	1-216-017-91	RES-CHIP	47	5%	1/10W
R4367	1-216-017-91	RES-CHIP	47	5%	1/10W
R4370	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4372	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R4375	1-216-033-00	RES-CHIP	220	5%	1/10W
R4377	1-216-033-00	RES-CHIP	220	5%	1/10W
R4380	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4382	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4384	1-216-025-91	RES-CHIP	100	5%	1/10W
R4385	1-216-129-00	RES-CHIP	2.2M	5%	1/10W
R4387	1-216-017-91	RES-CHIP	47	5%	1/10W
R4388	1-216-017-91	RES-CHIP	47	5%	1/10W
R4389	1-216-017-91	RES-CHIP	47	5%	1/10W
R4393	1-216-025-91	RES-CHIP	100	5%	1/10W
R4395	1-216-295-91	SHORT	0		
R4396	1-216-295-91	SHORT	0		
R4397	1-216-295-91	SHORT	0		
R4400	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R4401	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R4402	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4403	1-216-298-00	RES-CHIP	2.2	5%	1/10W
R4404	1-216-081-00	RES-CHIP	22K	5%	1/10W
R4405	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4406	1-216-073-00	RES-CHIP	10K	5%	1/10W
R4407	1-216-017-91	RES-CHIP	47	5%	1/10W
R4408	1-249-409-11	CARBON	220	5%	1/4W
R4504	1-216-025-91	RES-CHIP	100	5%	1/10W
R4514	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4515	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4516	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4517	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4518	1-216-025-91	RES-CHIP	100	5%	1/10W
R4519	1-216-025-91	RES-CHIP	100	5%	1/10W
R4520	1-216-045-00	RES-CHIP	680	5%	1/10W
R4521	1-216-045-00	RES-CHIP	680	5%	1/10W
R4522	1-216-025-91	RES-CHIP	100	5%	1/10W
R4523	1-216-025-91	RES-CHIP	100	5%	1/10W
R4524	1-216-049-91	RES-CHIP	1K	5%	1/10W
R4601	1-208-291-11	RES-CHIP	4.7M	5%	1/10W
R4602	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R4603	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
		<INDUCTOR>			
T4301	1-469-893-21	INDUCTOR (EMI REMOVE FILTER)			
		<CRYSTAL>			
X4300	1-767-127-11	VIBRATOR, CERAMIC (503.5kHz)			
**********					
	* A-1394-982-A	J1 BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C8301	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8302	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8303	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8304	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8305	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8306	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8307	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8308	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8309	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8310	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8311	1-164-346-11	CERAMIC CHIP	1µF		16V
C8312	1-164-346-11	CERAMIC CHIP	1µF		16V
C8313	1-164-346-11	CERAMIC CHIP	1µF		16V
C8314	1-164-346-11	CERAMIC CHIP	1µF		16V
C8315	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8316	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8317	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C8318	1-104-664-11	ELECT	47µF	20%	16V
C8319	1-104-664-11	ELECT	47µF	20%	16V
C8320	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C8321	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C8322	1-164-346-11	CERAMIC CHIP	1µF		16V
C8323	1-164-346-11	CERAMIC CHIP	1µF		16V
C8324	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C8325	1-126-935-11	ELECT	470µF	20%	16V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C8326	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C8327	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8328	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8329	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8330	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8331	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8332	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C8333	1-117-720-11	CERAMIC CHIP 4.7µF 10V	
C8334	1-163-249-11	CERAMIC CHIP 82pF 5% 50V	
C8336	1-104-664-11	ELECT 47µF 20% 16V	
C8337	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8338	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8339	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8340	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C8341	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C8342	1-126-964-11	ELECT 10µF 20% 50V	
C8343	1-104-664-11	ELECT 47µF 20% 16V	
C8344	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8345	1-104-664-11	ELECT 47µF 20% 16V	
C8346	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8347	1-163-133-00	CERAMIC CHIP 470pF 5% 50V	
C8348	1-163-133-00	CERAMIC CHIP 470pF 5% 50V	
C8349	1-104-664-11	ELECT 47µF 20% 16V	
C8350	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8351	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8352	1-104-664-11	ELECT 47µF 20% 16V	
C8354	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C8355	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8356	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8357	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8358	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8359	1-163-037-11	CERAMIC CHIP 0.022µF 10% 50V	
C8360	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8361	1-126-961-11	ELECT 2.2µF 20% 50V	
C8362	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8363	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8366	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8367	1-104-664-11	ELECT 47µF 20% 16V	
C8368	1-104-664-11	ELECT 47µF 20% 16V	
C8369	1-104-664-11	ELECT 47µF 20% 16V	
C8370	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8371	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8372	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8373	1-163-227-11	CERAMIC CHIP 10pF 0.50pF 50V	
C8374	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8375	1-126-964-11	ELECT 10µF 20% 50V	
C8376	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8381	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8386	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8390	1-126-963-11	ELECT 4.7µF 20% 50V	
C8391	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8392	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8393	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8396	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C8399	1-126-961-11	ELECT 2.2µF 20% 50V	
C8401	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8402	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8403	1-163-037-11	CERAMIC CHIP 0.022µF 10% 50V	
C8405	1-126-933-11	ELECT 100µF 20% 16V	
C8406	1-104-664-11	ELECT 47µF 20% 16V	
C8407	1-104-664-11	ELECT 47µF 20% 16V	
C8408	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8409	1-126-933-11	ELECT 100µF 20% 16V	
C8410	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8412	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8414	1-104-664-11	ELECT 47µF 20% 16V	
C8415	1-164-346-11	CERAMIC CHIP 1µF 16V	
C8416	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8417	1-163-227-11	CERAMIC CHIP 10pF 0.50pF 50V	
C8418	1-126-964-11	ELECT 10µF 20% 50V	
C8419	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8424	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8425	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8437	1-126-963-11	ELECT 4.7µF 20% 50V	
C8438	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8439	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8440	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8446	1-104-664-11	ELECT 47µF 20% 16V	
C8447	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8448	1-164-690-91	CERAMIC CHIP 0.0022µF 5% 50V	
C8450	1-107-823-11	CERAMIC CHIP 0.47µF 10% 16V	
C8451	1-164-505-11	CERAMIC CHIP 2.2µF 16V	
C8453	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8454	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8455	1-104-664-11	ELECT 47µF 20% 16V	
C8464	1-115-340-11	CERAMIC CHIP 0.22µF 10% 25V	
C8465	1-115-340-11	CERAMIC CHIP 0.22µF 10% 25V	
C8466	1-104-664-11	ELECT 47µF 20% 16V	
C8467	1-104-664-11	ELECT 47µF 20% 16V	
C8468	1-115-340-11	CERAMIC CHIP 0.22µF 10% 25V	
C8469	1-115-340-11	CERAMIC CHIP 0.22µF 10% 25V	
C8474	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8477	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8478	1-163-243-11	CERAMIC CHIP 47pF 5% 50V	
C8479	1-163-239-11	CERAMIC CHIP 33pF 5% 50V	
C8481	1-104-664-11	ELECT 47µF 20% 16V	
C8482	1-104-664-11	ELECT 47µF 20% 16V	
C8483	1-104-664-11	ELECT 47µF 20% 16V	
C8485	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8492	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8501	1-163-113-00	CERAMIC CHIP 68pF 5% 50V	
C8601	1-117-720-11	CERAMIC CHIP 4.7µF 10V	
C8602	1-117-720-11	CERAMIC CHIP 4.7µF 10V	
C8603	1-117-720-11	CERAMIC CHIP 4.7µF 10V	
C8604	1-117-720-11	CERAMIC CHIP 4.7µF 10V	
C8605	1-117-720-11	CERAMIC CHIP 4.7µF 10V	
C8606	1-117-720-11	CERAMIC CHIP 4.7µF 10V	
C8801	1-115-340-11	CERAMIC CHIP 0.22µF 10% 25V	
C8802	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8804	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8805	1-126-933-11	ELECT 100µF 20% 16V	
C8806	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
C8807	1-163-037-11	CERAMIC CHIP 0.022µF 10% 50V	
C8808	1-126-933-11	ELECT 100µF 20% 16V	
C8809	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C8810	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8811	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8812	1-104-664-11	ELECT 47µF 20% 16V	
C8813	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8814	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8815	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8816	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8817	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8818	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8819	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8820	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8821	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8823	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8824	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8826	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C8828	1-104-664-11	ELECT 47µF 20% 16V	
C8829	1-163-241-11	CERAMIC CHIP 39pF 5% 50V	
C8830	1-104-664-11	ELECT 47µF 20% 16V	
		<CONNECTOR>	
CN8101	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN8301 *	1-564-526-31	PLUG, CONNECTOR 11P	
		<DIODE>	
D8101	8-719-977-69	DIODE DTZ24B	
D8102	8-719-977-69	DIODE DTZ24B	
D8103	8-719-977-69	DIODE DTZ24B	
D8104	8-719-977-69	DIODE DTZ24B	
D8301	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8302	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8303	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8304	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8305	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8306	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8307	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8308	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8309	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8310	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8311	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8312	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8313	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8314	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8315	8-719-914-42	DIODE DA204K	
D8316	8-719-914-42	DIODE DA204K	
D8317	8-719-914-42	DIODE DA204K	
D8318	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8319	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8320	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8321	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8322	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8323	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8324	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8325	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8331	8-719-073-01	DIODE MA111-(K8).S0	
D8332	8-719-914-42	DIODE DA204K	
D8333	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8334	8-719-914-42	DIODE DA204K	
D8335	8-719-914-42	DIODE DA204K	
D8336	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8337	8-719-073-01	DIODE MA111-(K8).S0	
		<FILTER>	
FL8301	1-236-071-11	ENCAPSULATED COMPONENT	
FL8302	1-236-071-11	ENCAPSULATED COMPONENT	
FL8303	1-236-071-11	ENCAPSULATED COMPONENT	
FL8304	1-236-071-11	ENCAPSULATED COMPONENT	
FL8305	1-236-071-11	ENCAPSULATED COMPONENT	
FL8307	1-236-071-11	ENCAPSULATED COMPONENT	
FL8308	1-236-071-11	ENCAPSULATED COMPONENT	
FL8309	1-236-071-11	ENCAPSULATED COMPONENT	
FL8311	1-236-071-11	ENCAPSULATED COMPONENT	
FL8312	1-236-071-11	ENCAPSULATED COMPONENT	
FL8313	1-233-877-11	FILTER, LOW PASS	
FL8314	1-233-504-21	FILTER, LOW PASS	
FL8315	1-233-504-21	FILTER, LOW PASS	
FL8801	1-236-071-11	ENCAPSULATED COMPONENT	
FL8802	1-236-071-11	ENCAPSULATED COMPONENT	
FL8803	1-233-765-21	FILTER	
FL8804	1-233-766-21	FILTER	
FL8805	1-233-768-21	FILTER	
		<IC>	
IC8302	8-752-080-04	IC CXA2069Q	
IC8304	8-759-242-76	IC TC7W08F	
IC8305	8-759-242-76	IC TC7W08F	
IC8306	8-752-096-08	IC CXA2123BQ-T6	
IC8308	8-752-096-08	IC CXA2123BQ-T6	
IC8309	8-759-337-26	IC MM1115XFBE	
IC8310	8-759-572-04	IC TDA9178T/N1.118	
IC8311	8-759-576-72	IC LF50CDT-TR	
IC8312	8-759-576-72	IC LF50CDT-TR	
IC8801	8-752-390-37	IC CXD2064Q-T6	
		<JACK>	
J8301	1-774-748-11	TERMINAL BLOCK, S (VIDEO IN 1)	
J8302	1-774-746-11	JACK BLOCK, PIN (VIDEO IN 2)	
J8303	1-774-746-11	JACK BLOCK, PIN (VIDEO IN 3)	
J8304	1-774-746-11	JACK BLOCK, PIN (MONITOR OUT)	
J8305	1-774-358-11	JACK BLOCK, PIN (COMPONENT IN)	
J8901	1-565-838-11	JACK BLOCK, PIN 2P (AUDIO OUT)	
		<COIL>	
L8101	1-402-711-11	INDUCTOR 0µH	

REF.NO.	PART NO.	DESCRIPTION	REMARK
L8102	1-402-711-11	INDUCTOR 0µH	
L8304	1-412-029-11	INDUCTOR CHIP 10µH	
L8305	1-414-196-41	INDUCTOR 47µH	
L8306	1-414-196-41	INDUCTOR 47µH	
L8307	1-414-196-41	INDUCTOR 47µH	
L8501	1-412-029-11	INDUCTOR CHIP 10µH	
L8801	1-412-029-11	INDUCTOR CHIP 10µH	
L8802	1-412-029-11	INDUCTOR CHIP 10µH	
	<TRANSISTOR>		
Q8301	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8302	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8303	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8304	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8306	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8307	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8308	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8309	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8316	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8317	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8318	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8319	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8321	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8322	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8323	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8324	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8326	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8327	1-801-806-11	TRANSISTOR DTC144EKA	
Q8328	1-801-806-11	TRANSISTOR DTC144EKA	
Q8332	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8338	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8340	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8401	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8405	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8406	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8407	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8408	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8409	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8410	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8411	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8412	1-801-806-11	TRANSISTOR DTC144EKA	
Q8413	1-801-806-11	TRANSISTOR DTC144EKA	
Q8414	1-801-806-11	TRANSISTOR DTC144EKA	
Q8415	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8416	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8417	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8418	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8419	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8420	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8421	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8422	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8423	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8424	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8425	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8426	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8601	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8602	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8603	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8604	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8605	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8606	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8607	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8801	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8802	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8803	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8804	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8805	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8807	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8808	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8809	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q8810	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q8811	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
	<RESISTOR>		
R8301	1-216-041-00	RES-CHIP 470 5% 1/10W	
R8302	1-216-041-00	RES-CHIP 470 5% 1/10W	
R8303	1-216-021-00	RES-CHIP 68 5% 1/10W	
R8304	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8305	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8306	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8307	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8308	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8309	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8310	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8311	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8312	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8313	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8314	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8315	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8316	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R8317	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8318	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8319	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8320	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8321	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8322	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8323	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8324	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8325	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8326	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R8327	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8328	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R8329	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R8330	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8331	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8332	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8333	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8334	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8335	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R8336	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8337	1-216-022-00	RES-CHIP	75	5%	1/10W
R8338	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8339	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8340	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8341	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8342	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8343	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8344	1-216-022-00	RES-CHIP	75	5%	1/10W
R8345	1-216-025-91	RES-CHIP	100	5%	1/10W
R8346	1-216-025-91	RES-CHIP	100	5%	1/10W
R8347	1-216-025-91	RES-CHIP	100	5%	1/10W
R8348	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8349	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8350	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8351	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8352	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R8353	1-216-295-91	SHORT	0		
R8354	1-216-041-00	RES-CHIP	470	5%	1/10W
R8355	1-216-017-91	RES-CHIP	47	5%	1/10W
R8356	1-216-017-91	RES-CHIP	47	5%	1/10W
R8357	1-216-041-00	RES-CHIP	470	5%	1/10W
R8362	1-216-642-11	METAL CHIP	430	0.5%	1/10W
R8363	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R8364	1-216-041-00	RES-CHIP	470	5%	1/10W
R8365	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R8366	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R8367	1-216-041-00	RES-CHIP	470	5%	1/10W
R8368	1-216-041-00	RES-CHIP	470	5%	1/10W
R8369	1-216-295-91	SHORT	0		
R8370	1-216-025-91	RES-CHIP	100	5%	1/10W
R8373	1-216-039-00	RES-CHIP	390	5%	1/10W
R8374	1-216-041-00	RES-CHIP	470	5%	1/10W
R8375	1-216-017-91	RES-CHIP	47	5%	1/10W
R8376	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8377	1-216-025-91	RES-CHIP	100	5%	1/10W
R8378	1-216-033-00	RES-CHIP	220	5%	1/10W
R8379	1-216-033-00	RES-CHIP	220	5%	1/10W
R8380	1-216-025-91	RES-CHIP	100	5%	1/10W
R8381	1-216-025-91	RES-CHIP	100	5%	1/10W
R8382	1-216-033-00	RES-CHIP	220	5%	1/10W
R8383	1-216-033-00	RES-CHIP	220	5%	1/10W
R8384	1-216-025-91	RES-CHIP	100	5%	1/10W
R8385	1-216-025-91	RES-CHIP	100	5%	1/10W
R8386	1-216-025-91	RES-CHIP	100	5%	1/10W
R8387	1-216-017-91	RES-CHIP	47	5%	1/10W
R8388	1-216-031-00	RES-CHIP	180	5%	1/10W
R8389	1-216-033-00	RES-CHIP	220	5%	1/10W
R8390	1-216-017-91	RES-CHIP	47	5%	1/10W
R8391	1-216-017-91	RES-CHIP	47	5%	1/10W
R8392	1-216-017-91	RES-CHIP	47	5%	1/10W
R8393	1-216-017-91	RES-CHIP	47	5%	1/10W
R8394	1-216-025-91	RES-CHIP	100	5%	1/10W
R8395	1-216-033-00	RES-CHIP	220	5%	1/10W
R8396	1-216-033-00	RES-CHIP	220	5%	1/10W
R8397	1-216-025-91	RES-CHIP	100	5%	1/10W
R8398	1-216-025-91	RES-CHIP	100	5%	1/10W
R8399	1-216-025-91	RES-CHIP	100	5%	1/10W
R8400	1-216-025-91	RES-CHIP	100	5%	1/10W
R8401	1-216-017-91	RES-CHIP	47	5%	1/10W
R8402	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R8403	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R8404	1-216-025-91	RES-CHIP	100	5%	1/10W
R8405	1-216-033-00	RES-CHIP	220	5%	1/10W
R8406	1-216-033-00	RES-CHIP	220	5%	1/10W
R8407	1-216-033-00	RES-CHIP	220	5%	1/10W
R8408	1-216-033-00	RES-CHIP	220	5%	1/10W
R8409	1-216-295-91	SHORT	0		
R8410	1-216-295-91	SHORT	0		
R8411	1-216-083-00	RES-CHIP	27K	5%	1/10W
R8412	1-216-025-91	RES-CHIP	100	5%	1/10W
R8413	1-216-041-00	RES-CHIP	470	5%	1/10W
R8414	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R8417	1-216-025-91	RES-CHIP	100	5%	1/10W
R8418	1-216-025-91	RES-CHIP	100	5%	1/10W
R8419	1-216-017-91	RES-CHIP	47	5%	1/10W
R8420	1-216-017-91	RES-CHIP	47	5%	1/10W
R8421	1-216-295-91	SHORT	0		
R8422	1-216-295-91	SHORT	0		
R8424	1-216-083-00	RES-CHIP	27K	5%	1/10W
R8425	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8426	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R8427	1-216-295-91	SHORT	0		
R8428	1-216-295-91	SHORT	0		
R8431	1-216-295-91	SHORT	0		
R8432	1-216-295-91	SHORT	0		
R8436	1-216-017-91	RES-CHIP	47	5%	1/10W
R8437	1-208-291-11	RES-CHIP	4.7M	5%	1/10W
R8438	1-208-291-11	RES-CHIP	4.7M	5%	1/10W
R8439	1-208-291-11	RES-CHIP	4.7M	5%	1/10W
R8440	1-208-291-11	RES-CHIP	4.7M	5%	1/10W
R8441	1-208-291-11	RES-CHIP	4.7M	5%	1/10W
R8443	1-216-025-91	RES-CHIP	100	5%	1/10W
R8444	1-216-025-91	RES-CHIP	100	5%	1/10W
R8445	1-216-017-91	RES-CHIP	47	5%	1/10W
R8446	1-216-295-91	SHORT	0		
R8447	1-216-041-00	RES-CHIP	470	5%	1/10W
R8448	1-216-033-00	RES-CHIP	220	5%	1/10W
R8449	1-216-041-00	RES-CHIP	470	5%	1/10W
R8451	1-216-041-00	RES-CHIP	470	5%	1/10W
R8452	1-216-041-00	RES-CHIP	470	5%	1/10W
R8453	1-216-033-00	RES-CHIP	220	5%	1/10W
R8454	1-216-041-00	RES-CHIP	470	5%	1/10W
R8455	1-216-041-00	RES-CHIP	470	5%	1/10W
R8456	1-216-041-00	RES-CHIP	470	5%	1/10W
R8458	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8461	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8464	1-216-041-00	RES-CHIP	470	5%	1/10W
R8465	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8466	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8467	1-216-113-00	RES-CHIP	470K	5%	1/10W
R8468	1-216-113-00	RES-CHIP	470K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R8469	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8470	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R8471	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R8472	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8473	1-216-025-91	RES-CHIP	100	5%	1/10W
R8478	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8479	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8480	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8481	1-216-095-00	RES-CHIP	82K	5%	1/10W
R8482	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8484	1-216-045-00	RES-CHIP	680	5%	1/10W
R8485	1-216-013-00	RES-CHIP	33	5%	1/10W
R8487	1-216-045-00	RES-CHIP	680	5%	1/10W
R8488	1-216-041-00	RES-CHIP	470	5%	1/10W
R8490	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8494	1-216-295-91	SHORT	0		
R8496	1-216-025-91	RES-CHIP	100	5%	1/10W
R8502	1-216-295-91	SHORT	0		
R8503	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8504	1-216-025-91	RES-CHIP	100	5%	1/10W
R8510	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8514	1-216-295-91	SHORT	0		
R8515	1-216-295-91	SHORT	0		
R8519	1-216-025-91	RES-CHIP	100	5%	1/10W
R8523	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8525	1-216-025-91	RES-CHIP	100	5%	1/10W
R8526	1-216-037-00	RES-CHIP	330	5%	1/10W
R8529	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8530	1-216-025-91	RES-CHIP	100	5%	1/10W
R8531	1-216-295-91	SHORT	0		
R8535	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8536	1-216-025-91	RES-CHIP	100	5%	1/10W
R8537	1-216-025-91	RES-CHIP	100	5%	1/10W
R8539	1-216-025-91	RES-CHIP	100	5%	1/10W
R8542	1-216-041-00	RES-CHIP	470	5%	1/10W
R8543	1-216-039-00	RES-CHIP	390	5%	1/10W
R8544	1-216-041-00	RES-CHIP	470	5%	1/10W
R8545	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8546	1-216-295-91	SHORT	0		
R8547	1-216-295-91	SHORT	0		
R8548	1-216-025-91	RES-CHIP	100	5%	1/10W
R8552	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8554	1-216-025-91	RES-CHIP	100	5%	1/10W
R8555	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R8556	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8557	1-208-768-11	METAL CHIP	270	0.5%	1/10W
R8558	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8559	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8561	1-216-025-91	RES-CHIP	100	5%	1/10W
R8562	1-216-043-91	RES-CHIP	560	5%	1/10W
R8563	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8564	1-216-033-00	RES-CHIP	220	5%	1/10W
R8565	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8566	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8568	1-216-295-91	SHORT	0		
R8571	1-216-025-91	RES-CHIP	100	5%	1/10W
R8572	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8573	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R8574	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R8575	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8577	1-216-295-91	SHORT	0		
R8580	1-216-025-91	RES-CHIP	100	5%	1/10W
R8581	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8582	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R8583	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R8584	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8586	1-216-295-91	SHORT	0		
R8589	1-216-025-91	RES-CHIP	100	5%	1/10W
R8590	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8591	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R8592	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R8593	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8595	1-216-295-91	SHORT	0		
R8596	1-216-295-91	SHORT	0		
R8601	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8602	1-216-025-91	RES-CHIP	100	5%	1/10W
R8603	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8604	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8605	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8606	1-216-025-91	RES-CHIP	100	5%	1/10W
R8607	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8608	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8609	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8610	1-216-025-91	RES-CHIP	100	5%	1/10W
R8611	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8612	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8613	1-216-033-00	RES-CHIP	220	5%	1/10W
R8614	1-216-031-00	RES-CHIP	180	5%	1/10W
R8615	1-216-025-91	RES-CHIP	100	5%	1/10W
R8616	1-216-295-91	SHORT	0		
R8617	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8618	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8619	1-216-025-91	RES-CHIP	100	5%	1/10W
R8620	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8621	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8622	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8623	1-216-025-91	RES-CHIP	100	5%	1/10W
R8624	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8625	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8626	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8627	1-216-025-91	RES-CHIP	100	5%	1/10W
R8628	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8629	1-216-295-91	SHORT	0		
R8630	1-208-765-11	METAL CHIP	200	0.5%	1/10W
R8631	1-216-033-00	RES-CHIP	220	5%	1/10W
R8632	1-216-025-91	RES-CHIP	100	5%	1/10W
R8633	1-216-025-91	RES-CHIP	100	5%	1/10W
R8634	1-216-025-91	RES-CHIP	100	5%	1/10W
R8801	1-216-017-91	RES-CHIP	47	5%	1/10W
R8803	1-216-075-00	RES-CHIP	12K	5%	1/10W
R8804	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R8805	1-216-037-00	RES-CHIP	330	5%	1/10W

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R8806	1-216-041-00	RES-CHIP	470	5%	1/10W
R8807	1-216-033-00	RES-CHIP	220	5%	1/10W
R8808	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R8809	1-216-037-00	RES-CHIP	330	5%	1/10W
R8810	1-216-043-91	RES-CHIP	560	5%	1/10W
R8811	1-216-091-00	RES-CHIP	56K	5%	1/10W
R8812	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R8813	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8814	1-216-017-91	RES-CHIP	47	5%	1/10W
R8815	1-216-295-91	SHORT	0		
R8816	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R8819	1-216-295-91	SHORT	0		
R8820	1-208-770-11	METAL CHIP	330	0.5%	1/10W
R8821	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R8822	1-208-770-11	METAL CHIP	330	0.5%	1/10W
R8823	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8824	1-208-793-11	METAL CHIP	3K	0.5%	1/10W
R8825	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8826	1-216-047-91	RES-CHIP	820	5%	1/10W
R8827	1-208-789-11	METAL CHIP	2K	0.5%	1/10W
R8828	1-216-047-91	RES-CHIP	820	5%	1/10W
R8829	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R8830	1-216-295-91	SHORT	0		
R8832	1-216-295-91	SHORT	0		
R8834	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R8835	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R8838	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R8840	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8841	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8844	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8847	1-216-295-91	SHORT	0		
R8848	1-216-295-91	SHORT	0		
R8849	1-216-035-00	RES-CHIP	270	5%	1/10W
R8851	1-216-041-00	RES-CHIP	470	5%	1/10W
R8852	1-216-041-00	RES-CHIP	470	5%	1/10W
R8853	1-216-093-91	RES-CHIP	68K	5%	1/10W
R8854	1-216-083-00	RES-CHIP	27K	5%	1/10W
R8855	1-216-043-91	RES-CHIP	560	5%	1/10W
R8856	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R8857	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
		<TERMINALBOARD>			
TB8101	1-537-712-11	TERMINAL, PUSH (CENTER SP IN)			
		<CRYSTAL>			
X8301	1-781-612-11	VIBRATOR, CRYSTAL (16.2MHz)			
X8302	1-781-612-11	VIBRATOR, CRYSTAL (16.2MHz)			

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REF.NO.	PART NO.	DESCRIPTION			REMARK
*	A-1136-088-A	BD BOARD, COMPLETE			
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		<CAPACITOR>			
C2601	1-104-664-11	ELECT	47µF	20%	25V
C2602	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C2603	1-104-664-11	ELECT	47µF	20%	25V
C2604	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2607	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C2608	1-104-664-11	ELECT	47µF	20%	25V
C2609	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2610	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2611	1-104-664-11	ELECT	47µF	20%	25V
C2612	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2613	1-104-664-11	ELECT	47µF	20%	25V
C2615	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2616	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2617	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2618	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2619	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C2620	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2621	1-104-664-11	ELECT	47µF	20%	25V
C2622	1-104-664-11	ELECT	47µF	20%	25V
C2623	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2624	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C2625	1-104-664-11	ELECT	47µF	20%	25V
C2626	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2627	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2628	1-104-664-11	ELECT	47µF	20%	25V
C2631	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C2633	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2635	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2636	1-104-664-11	ELECT	47µF	20%	25V
C2637	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C2639	1-104-664-11	ELECT	47µF	20%	25V
C2640	1-104-664-11	ELECT	47µF	20%	25V
C2641	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2643	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2644	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C2645	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2647	1-104-664-11	ELECT	47µF	20%	25V
C2648	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2649	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2650	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2651	1-104-664-11	ELECT	47µF	20%	25V
C2652	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2655	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C2656	1-104-664-11	ELECT	47µF	20%	25V
C2658	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2659	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2660	1-104-664-11	ELECT	47µF	20%	25V
C2661	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C2662	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C2663	1-104-664-11	ELECT	47µF	20%	25V
C2666	1-163-038-91	CERAMIC CHIP	0.1µF		25V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C2667	1-164-690-91	CERAMIC CHIP 0.0022µF 5%	50V
C2668	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2670	1-104-664-11	ELECT 47µF 20%	25V
C2673	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2674	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2675	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2678	1-163-275-11	CERAMIC CHIP 0.001µF 5%	50V
C2679	1-104-664-11	ELECT 47µF 20%	25V
C2680	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2681	1-104-664-11	ELECT 47µF 20%	25V
C2683	1-104-664-11	ELECT 47µF 20%	25V
C2685	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2686	1-164-690-91	CERAMIC CHIP 0.0022µF 5%	50V
C2689	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2690	1-126-967-11	ELECT 47µF 20%	50V
C2691	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2692	1-126-967-11	ELECT 47µF 20%	50V
C2693	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2694	1-104-664-11	ELECT 47µF 20%	25V
C2695	1-163-259-91	CERAMIC CHIP 220pF 5%	50V
C2696	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2697	1-104-664-11	ELECT 47µF 20%	25V
C2698	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2699	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2700	1-163-001-11	CERAMIC CHIP 220pF 10%	50V
C2701	1-164-346-11	CERAMIC CHIP 1µF	16V
C2705	1-163-275-11	CERAMIC CHIP 0.001µF 5%	50V
C2706	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2707	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2708	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2709	1-104-664-11	ELECT 47µF 20%	25V
C2710	1-126-935-11	ELECT 470µF 20%	6.3V
C2711	1-126-935-11	ELECT 470µF 20%	6.3V
C2713	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2714	1-104-664-11	ELECT 47µF 20%	25V
C2715	1-164-690-91	CERAMIC CHIP 0.0022µF 5%	50V
C2716	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2717	1-104-664-11	ELECT 47µF 20%	25V
C2718	1-164-346-11	CERAMIC CHIP 1µF	16V
C2719	1-164-004-11	CERAMIC CHIP 0.1µF 10%	25V
C2720	1-104-664-11	ELECT 47µF 20%	25V
C2721	1-163-259-91	CERAMIC CHIP 220pF 5%	50V
C2724	1-163-275-11	CERAMIC CHIP 0.001µF 5%	50V
C2725	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2726	1-126-964-11	ELECT 10µF 20%	50V
C2727	1-164-346-11	CERAMIC CHIP 1µF	16V
C2728	1-163-009-11	CERAMIC CHIP 0.001µF 10%	50V
C2729	1-163-009-11	CERAMIC CHIP 0.001µF 10%	50V
C2730	1-104-664-11	ELECT 47µF 20%	25V
C2731	1-164-346-11	CERAMIC CHIP 1µF	16V
C2733	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2737	1-164-690-91	CERAMIC CHIP 0.0022µF 5%	50V
C2738	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2739	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2740	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2741	1-163-237-11	CERAMIC CHIP 27pF 5%	50V
C2742	1-163-231-11	CERAMIC CHIP 15pF 5%	50V
C2744	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2745	1-104-664-11	ELECT 47µF 20%	25V
C2746	1-104-664-11	ELECT 47µF 20%	25V
C2747	1-104-664-11	ELECT 47µF 20%	25V
C2748	1-163-259-91	CERAMIC CHIP 220pF 5%	50V
C2749	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2750	1-126-935-11	ELECT 470µF 20%	6.3V
C2751	1-126-935-11	ELECT 470µF 20%	6.3V
C2753	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2754	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2755	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2756	1-104-664-11	ELECT 47µF 20%	25V
C2757	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2758	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2759	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2760	1-163-235-11	CERAMIC CHIP 22pF 5%	50V
C2761	1-163-263-11	CERAMIC CHIP 330pF 5%	50V
C2762	1-107-823-11	CERAMIC CHIP 0.47µF 10%	16V
C2763	1-104-664-11	ELECT 47µF 20%	16V
C2764	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2765	1-107-823-11	CERAMIC CHIP 0.47µF 10%	16V
C2766	1-163-016-00	CERAMIC CHIP 0.0039µF 10%	50V
C2767	1-163-016-00	CERAMIC CHIP 0.0039µF 10%	50V
C2768	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2769	1-104-664-11	ELECT 47µF 20%	16V
C2770	1-163-263-11	CERAMIC CHIP 330pF 5%	50V
C2771	1-163-016-00	CERAMIC CHIP 0.0039µF 10%	50V
C2772	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2773	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2774	1-163-016-00	CERAMIC CHIP 0.0039µF 10%	50V
C2775	1-104-664-11	ELECT 47µF 20%	16V
C2776	1-104-664-11	ELECT 47µF 20%	16V
C2777	1-163-263-11	CERAMIC CHIP 330pF 5%	50V
C2778	1-163-263-11	CERAMIC CHIP 330pF 5%	50V
C2779	1-107-823-11	CERAMIC CHIP 0.47µF 10%	16V
C2780	1-107-823-11	CERAMIC CHIP 0.47µF 10%	16V
C2781	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C2782	1-163-038-91	CERAMIC CHIP 0.1µF	25V
		<CONNECTOR>	
CN2601 *	1-564-522-11	PLUG, CONNECTOR 7P	
CN2602	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	
CN2603 *	1-564-511-11	PLUG, CONNECTOR 8P	
CN2604	1-695-915-11	TAB (CONTACT)	
		<DIODE>	
D2601	8-719-988-61	DIODE 1SS355TE-17	
D2602	8-719-988-61	DIODE 1SS355TE-17	
D2603	8-719-988-61	DIODE 1SS355TE-17	
D2604	8-719-988-61	DIODE 1SS355TE-17	
D2605	8-719-976-99	DIODE DTZ5.1B	
D2606	8-719-988-61	DIODE 1SS355TE-17	
D2607	8-719-158-49	DIODE RD12SB2	

BD

REF.NO.	PART NO.	DESCRIPTION	REMARK
D2608	8-719-976-99	DIODE DTZ5.1B	
D2609	8-719-988-61	DIODE 1SS355TE-17	
D2610	8-719-988-61	DIODE 1SS355TE-17	
D2611	8-719-988-61	DIODE 1SS355TE-17	
D2612	8-719-976-99	DIODE DTZ5.1B	
D2613	8-719-158-49	DIODE RD12SB2	
D2614	8-719-976-99	DIODE DTZ5.1B	
D2615	8-719-988-61	DIODE 1SS355TE-17	
D2616	8-719-976-99	DIODE DTZ5.1B	
D2617	8-719-158-49	DIODE RD12SB2	
D2618	8-719-976-99	DIODE DTZ5.1B	
D2619	8-719-988-61	DIODE 1SS355TE-17	
D2620	8-719-158-49	DIODE RD12SB2	
D2621	8-719-976-99	DIODE DTZ5.1B	
D2622	8-719-976-99	DIODE DTZ5.1B	
D2623	8-719-988-61	DIODE 1SS355TE-17	
D2624	8-719-988-61	DIODE 1SS355TE-17	
		<FERRITBEAD>	
FB2601	1-216-295-91	SHORT 0	
FB2602	1-216-295-91	SHORT 0	
FB2603	1-216-295-91	SHORT 0	
FB2604	1-216-295-91	SHORT 0	
		<IC>	
IC2601	8-759-106-02	IC µPC4570G2	
IC2602	8-759-998-22	IC PCM56P	
IC2603	8-759-106-02	IC µPC4570G2	
IC2604	8-759-998-22	IC PCM56P	
IC2605	8-759-589-66	IC CM0006CF	
IC2606	8-759-485-79	IC TC7SET08FU(TE85)	
IC2607	8-759-925-85	IC SN74HC32ANS	
IC2608	8-759-106-02	IC µPC4570G2	
IC2609	8-759-998-22	IC PCM56P	
IC2610	8-759-106-02	IC µPC4570G2	
IC2611	8-759-488-29	IC TC7W66FU(TE12R)	
IC2612	8-759-669-75	IC TLC2932IPWR	
IC2613	8-759-925-90	IC SN74HC74ANS	
IC2614	8-759-998-22	IC PCM56P	
IC2615	8-759-485-79	IC TC7SET08FU(TE85)	
IC2616	8-759-106-02	IC µPC4570G2	
IC2617	8-759-352-91	IC PST9143NL	
IC2618	8-759-038-15	IC MC74HC4538AF	
IC2619	8-752-916-83	IC CXP86324-028Q	
IC2620	8-759-367-69	IC MC74HC74AFEL	
IC2621	8-759-564-06	IC M24C32-MN6T	
IC2622	8-759-106-02	IC µPC4570G2	
IC2623	8-759-998-22	IC PCM56P	
IC2625	8-759-998-22	IC PCM56P	
IC2626	8-759-394-80	IC NJM2058M-TE2	
IC2627	8-759-394-80	IC NJM2058M-TE2	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CHIP CONDUCTOR>	
JR2605	1-216-295-91	SHORT 0	
		<COIL>	
L2601	1-414-234-22	INDUCTOR CHIP	0µH
L2602	1-414-234-22	INDUCTOR CHIP	0µH
L2605	1-469-555-21	INDUCTOR	10µH
L2606	1-414-234-22	INDUCTOR CHIP	0µH
L2608	1-469-555-21	INDUCTOR	10µH
L2609	1-414-234-22	INDUCTOR CHIP	0µH
L2610	1-414-234-22	INDUCTOR CHIP	0µH
L2611	1-412-029-11	INDUCTOR CHIP	10µH
L2612	1-414-234-22	INDUCTOR CHIP	0µH
L2615	1-414-234-22	INDUCTOR CHIP	0µH
L2616	1-414-234-22	INDUCTOR CHIP	0µH
L2617	1-469-555-21	INDUCTOR	10µH
L2618	1-469-555-21	INDUCTOR	10µH
L2619	1-414-234-22	INDUCTOR CHIP	0µH
L2621	1-414-234-22	INDUCTOR CHIP	0µH
L2622	1-414-234-22	INDUCTOR CHIP	0µH
L2625	1-414-234-22	INDUCTOR CHIP	0µH
L2626	1-469-555-21	INDUCTOR	10µH
L2627	1-414-234-22	INDUCTOR CHIP	0µH
L2628	1-469-555-21	INDUCTOR	10µH
L2629	1-414-234-22	INDUCTOR CHIP	0µH
L2633	1-412-029-11	INDUCTOR CHIP	10µH
L2634	1-414-234-22	INDUCTOR CHIP	0µH
L2635	1-414-234-22	INDUCTOR CHIP	0µH
L2636	1-469-555-21	INDUCTOR	10µH
L2637	1-414-234-22	INDUCTOR CHIP	0µH
L2638	1-414-234-22	INDUCTOR CHIP	0µH
L2639	1-469-555-21	INDUCTOR	10µH
L2640	1-414-234-22	INDUCTOR CHIP	0µH
L2643	1-414-234-22	INDUCTOR CHIP	0µH
L2645	1-469-555-21	INDUCTOR	10µH
L2646	1-414-234-22	INDUCTOR CHIP	0µH
L2647	1-414-234-22	INDUCTOR CHIP	0µH
L2648	1-469-555-21	INDUCTOR	10µH
L2649	1-412-029-11	INDUCTOR CHIP	10µH
L2652	1-414-234-22	INDUCTOR CHIP	0µH
L2653	1-469-555-21	INDUCTOR	10µH
L2654	1-414-234-22	INDUCTOR CHIP	0µH
L2656	1-469-555-21	INDUCTOR	10µH
L2657	1-414-234-22	INDUCTOR CHIP	0µH
L2658	1-414-234-22	INDUCTOR CHIP	0µH
L2659	1-414-234-22	INDUCTOR CHIP	0µH
L2661	1-414-234-22	INDUCTOR CHIP	0µH
L2663	1-414-234-22	INDUCTOR CHIP	0µH
L2664	1-414-234-22	INDUCTOR CHIP	0µH
L2665	1-216-295-91	SHORT 0	
L2666	1-216-295-91	SHORT 0	
L2667	1-216-295-91	SHORT 0	
L2668	1-216-295-91	SHORT 0	
L2669	1-216-295-91	SHORT 0	

REF.NO.	PART NO.	DESCRIPTION			REMARK
L2670	1-216-295-91	SHORT	0		
	<TRANSISTOR>				
Q2601	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q2602	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R			
Q2603	1-801-806-11	TRANSISTOR DTC144EKA			
Q2604	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R			
Q2605	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q2606	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q2607	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R			
Q2608	1-801-806-11	TRANSISTOR DTC144EKA			
Q2610	1-801-806-11	TRANSISTOR DTC144EKA			
Q2611	1-801-806-11	TRANSISTOR DTC144EKA			
Q2612	1-801-806-11	TRANSISTOR DTC144EKA			
Q2613	1-801-806-11	TRANSISTOR DTC144EKA			
Q2614	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
	<RESISTOR>				
R2601	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2602	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2603	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2606	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2607	1-216-295-91	SHORT	0		
R2608	1-216-295-91	SHORT	0		
R2609	1-216-025-91	RES-CHIP	100	5%	1/10W
R2610	1-216-025-91	RES-CHIP	100	5%	1/10W
R2611	1-216-025-91	RES-CHIP	100	5%	1/10W
R2612	1-216-025-91	RES-CHIP	100	5%	1/10W
R2613	1-216-025-91	RES-CHIP	100	5%	1/10W
R2621	1-216-025-91	RES-CHIP	100	5%	1/10W
R2622	1-216-025-91	RES-CHIP	100	5%	1/10W
R2623	1-216-025-91	RES-CHIP	100	5%	1/10W
R2624	1-216-081-00	RES-CHIP	22K	5%	1/10W
R2625	1-216-025-91	RES-CHIP	100	5%	1/10W
R2628	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2629	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2630	1-208-816-11	METAL CHIP	27K	0.5%	1/10W
R2631	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2632	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2634	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2635	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R2636	1-216-295-91	SHORT	0		
R2637	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R2638	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2639	1-208-801-11	METAL CHIP	6.2K	0.5%	1/10W
R2640	1-216-033-00	RES-CHIP	220	5%	1/10W
R2641	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2643	1-216-033-00	RES-CHIP	220	5%	1/10W
R2644	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R2645	1-216-033-00	RES-CHIP	220	5%	1/10W
R2646	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2647	1-216-025-91	RES-CHIP	100	5%	1/10W
R2648	1-216-295-91	SHORT	0		
R2649	1-216-295-91	SHORT	0		

REF.NO.	PART NO.	DESCRIPTION			REMARK
R2650	1-216-025-91	RES-CHIP	100	5%	1/10W
R2651	1-216-025-91	RES-CHIP	100	5%	1/10W
R2652	1-216-025-91	RES-CHIP	100	5%	1/10W
R2653	1-216-025-91	RES-CHIP	100	5%	1/10W
R2654	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R2655	1-216-025-91	RES-CHIP	100	5%	1/10W
R2657	1-216-025-91	RES-CHIP	100	5%	1/10W
R2658	1-216-025-91	RES-CHIP	100	5%	1/10W
R2659	1-216-025-91	RES-CHIP	100	5%	1/10W
R2661	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2662	1-216-025-91	RES-CHIP	100	5%	1/10W
R2663	1-216-025-91	RES-CHIP	100	5%	1/10W
R2664	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2665	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2666	1-216-033-00	RES-CHIP	220	5%	1/10W
R2667	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2668	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2669	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2671	1-216-025-91	RES-CHIP	100	5%	1/10W
R2672	1-216-025-91	RES-CHIP	100	5%	1/10W
R2673	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2674	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2675	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2676	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2677	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2678	1-216-025-91	RES-CHIP	100	5%	1/10W
R2679	1-216-025-91	RES-CHIP	100	5%	1/10W
R2680	1-216-033-00	RES-CHIP	220	5%	1/10W
R2681	1-216-025-91	RES-CHIP	100	5%	1/10W
R2682	1-216-025-91	RES-CHIP	100	5%	1/10W
R2683	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2684	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2685	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2688	1-216-037-00	RES-CHIP	330	5%	1/10W
R2689	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2690	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2691	1-216-295-91	SHORT	0		
R2692	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2693	1-216-295-91	SHORT	0		
R2694	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2695	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2698	1-216-037-00	RES-CHIP	330	5%	1/10W
R2699	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2701	1-216-041-00	RES-CHIP	470	5%	1/10W
R2703	1-216-037-00	RES-CHIP	330	5%	1/10W
R2704	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2705	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2706	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2707	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2708	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2709	1-216-025-91	RES-CHIP	100	5%	1/10W
R2710	1-216-025-91	RES-CHIP	100	5%	1/10W
R2712	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2714	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2715	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2716	1-216-025-91	RES-CHIP	100	5%	1/10W

BD

REF.NO.	PART NO.	DESCRIPTION			REMARK
R2717	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2719	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2720	1-216-295-91	SHORT	0		
R2721	1-216-295-91	SHORT	0		
R2723	1-208-793-11	METAL CHIP	3K	0.5%	1/10W
R2725	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R2726	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R2728	1-216-025-91	RES-CHIP	100	5%	1/10W
R2729	1-216-033-00	RES-CHIP	220	5%	1/10W
R2730	1-216-025-91	RES-CHIP	100	5%	1/10W
R2731	1-208-850-11	METAL CHIP	680K	0.5%	1/10W
R2732	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2733	1-216-025-91	RES-CHIP	100	5%	1/10W
R2734	1-216-025-91	RES-CHIP	100	5%	1/10W
R2735	1-216-025-91	RES-CHIP	100	5%	1/10W
R2736	1-216-025-91	RES-CHIP	100	5%	1/10W
R2737	1-216-025-91	RES-CHIP	100	5%	1/10W
R2738	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2739	1-216-025-91	RES-CHIP	100	5%	1/10W
R2740	1-216-025-91	RES-CHIP	100	5%	1/10W
R2741	1-216-033-00	RES-CHIP	220	5%	1/10W
R2742	1-216-025-91	RES-CHIP	100	5%	1/10W
R2743	1-216-025-91	RES-CHIP	100	5%	1/10W
R2744	1-216-025-91	RES-CHIP	100	5%	1/10W
R2745	1-216-025-91	RES-CHIP	100	5%	1/10W
R2746	1-208-850-11	METAL CHIP	680K	0.5%	1/10W
R2747	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2750	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2751	1-216-025-91	RES-CHIP	100	5%	1/10W
R2752	1-216-025-91	RES-CHIP	100	5%	1/10W
R2753	1-216-025-91	RES-CHIP	100	5%	1/10W
R2755	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2756	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2758	1-216-025-91	RES-CHIP	100	5%	1/10W
R2759	1-216-033-00	RES-CHIP	220	5%	1/10W
R2760	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2761	1-216-295-91	SHORT	0		
R2762	1-216-295-91	SHORT	0		
R2763	1-216-025-91	RES-CHIP	100	5%	1/10W
R2764	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2765	1-216-025-91	RES-CHIP	100	5%	1/10W
R2766	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2767	1-216-033-00	RES-CHIP	220	5%	1/10W
R2768	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2769	1-216-025-91	RES-CHIP	100	5%	1/10W
R2771	1-216-033-00	RES-CHIP	220	5%	1/10W
R2773	1-216-025-91	RES-CHIP	100	5%	1/10W
R2774	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2775	1-216-025-91	RES-CHIP	100	5%	1/10W
R2777	1-216-025-91	RES-CHIP	100	5%	1/10W
R2778	1-216-025-91	RES-CHIP	100	5%	1/10W
R2779	1-216-025-91	RES-CHIP	100	5%	1/10W
R2781	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2782	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2783	1-216-295-91	SHORT	0		
R2784	1-216-025-91	RES-CHIP	100	5%	1/10W
R2785	1-216-041-00	RES-CHIP	470	5%	1/10W
R2786	1-216-041-00	RES-CHIP	470	5%	1/10W
R2787	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2789	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2790	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R2791	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2792	1-216-033-00	RES-CHIP	220	5%	1/10W
R2793	1-216-033-00	RES-CHIP	220	5%	1/10W
R2794	1-216-025-91	RES-CHIP	100	5%	1/10W
R2796	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2797	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2799	1-208-810-11	METAL CHIP	15K	0.5%	1/10W
R2800	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2803	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R2804	1-216-295-91	SHORT	0		
R2805	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2806	1-216-025-91	RES-CHIP	100	5%	1/10W
R2807	1-216-295-91	SHORT	0		
R2808	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2809	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2810	1-216-025-91	RES-CHIP	100	5%	1/10W
R2811	1-216-025-91	RES-CHIP	100	5%	1/10W
R2812	1-216-025-91	RES-CHIP	100	5%	1/10W
R2813	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2814	1-216-025-91	RES-CHIP	100	5%	1/10W
R2815	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2818	1-216-025-91	RES-CHIP	100	5%	1/10W
R2821	1-216-025-91	RES-CHIP	100	5%	1/10W
R2823	1-216-033-00	RES-CHIP	220	5%	1/10W
R2824	1-216-033-00	RES-CHIP	220	5%	1/10W
R2825	1-216-033-00	RES-CHIP	220	5%	1/10W
R2826	1-216-033-00	RES-CHIP	220	5%	1/10W
R2827	1-216-033-00	RES-CHIP	220	5%	1/10W
R2831	1-216-025-91	RES-CHIP	100	5%	1/10W
R2832	1-216-025-91	RES-CHIP	100	5%	1/10W
R2834	1-216-025-91	RES-CHIP	100	5%	1/10W
R2835	1-216-025-91	RES-CHIP	100	5%	1/10W
R2836	1-216-118-00	RES-CHIP	750K	5%	1/10W
R2837	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2838	1-216-122-11	RES-CHIP	1.1M	5%	1/10W
R2839	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2840	1-216-025-91	RES-CHIP	100	5%	1/10W
R2841	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2842	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2843	1-216-295-91	SHORT	0		
R2844	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2845	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2846	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2847	1-216-025-91	RES-CHIP	100	5%	1/10W
R2848	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2849	1-216-025-91	RES-CHIP	100	5%	1/10W
R2850	1-216-124-11	RES-CHIP	1.3M	5%	1/10W
R2851	1-216-124-11	RES-CHIP	1.3M	5%	1/10W
R2852	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2853	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2872	1-216-049-91	RES-CHIP	1K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R2873	1-216-049-91	RES-CHIP	1K	5%	1/10W
		<CRYSTAL>			
X2701	1-767-925-21	VIBRATOR, CRYSTAL (12MHz)			
**********					
	* A-1343-830-A	DS BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C3501	1-104-664-11	ELECT	47µF	20%	25V
C3502	1-104-664-11	ELECT	47µF	20%	25V
C3503	1-104-664-11	ELECT	47µF	20%	25V
C3504	1-104-664-11	ELECT	47µF	20%	25V
C3505	1-104-664-11	ELECT	47µF	20%	25V
C3506	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C3507	1-126-964-11	ELECT	10µF	20%	50V
C3508	1-107-714-11	ELECT	10µF	20%	16V
C3509	1-137-371-11	MYLAR	0.015µF	5%	50V
C3510	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3511	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3512	1-104-664-11	ELECT	47µF	20%	25V
C3513	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3514	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3515	1-104-664-11	ELECT	47µF	20%	25V
C3518	1-163-224-11	CERAMIC CHIP	7pF	0.25pF	50V
C3519	1-104-664-11	ELECT	47µF	20%	25V
C3520	1-137-374-11	MYLAR	0.047µF	5%	50V
C3523	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C3525	1-104-664-11	ELECT	47µF	20%	25V
C3526	1-104-664-11	ELECT	47µF	20%	25V
C3528	1-107-714-11	ELECT	10µF	20%	16V
C3529	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
		<CONNECTOR>			
CN3501	* 1-691-632-21	CONNECTOR, BOARD TO BOARD 15P			
		<DIODE>			
D3501	8-719-158-15	DIODE RD5.6S-B			
D3502	8-719-914-44	DIODE DAP202K			
D3503	8-719-158-15	DIODE RD5.6S-B			
		<IC>			
IC3502	8-759-251-31	IC CA0007AM			
IC3503	8-759-251-31	IC CA0007AM			
IC3504	8-759-251-31	IC CA0007AM			
IC3505	8-759-711-28	IC NJM2058D			
IC3506	8-759-100-96	IC µPC4558G2			
		<RESISTOR>			
R3501	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3502	1-216-093-91	RES-CHIP	68K	5%	1/10W
R3503	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3504	1-216-689-11	RES-CHIP	39K	5%	1/10W
R3506	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3507	1-216-689-11	RES-CHIP	39K	5%	1/10W
R3508	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3509	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3511	1-208-803-11	METAL CHIP	7.5K	0.5%	1/10W
R3512	1-216-033-00	RES-CHIP	220	5%	1/10W
R3513	1-216-033-00	RES-CHIP	220	5%	1/10W
R3514	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3515	1-216-033-00	RES-CHIP	220	5%	1/10W
R3518	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R3519	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3520	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3521	1-216-103-00	RES-CHIP	180K	5%	1/10W
R3523	1-216-099-00	RES-CHIP	120K	5%	1/10W
R3524	1-216-097-91	RES-CHIP	100K	5%	1/10W
R3526	1-216-039-00	RES-CHIP	390	5%	1/10W
R3529	1-216-107-00	RES-CHIP	270K	5%	1/10W
R3530	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3531	1-216-041-00	RES-CHIP	470	5%	1/10W
R3532	1-216-037-00	RES-CHIP	330	5%	1/10W
R3533	1-216-075-00	RES-CHIP	12K	5%	1/10W
R3535	1-216-097-91	RES-CHIP	100K	5%	1/10W
R3537	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3538	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3541	1-216-079-00	RES-CHIP	18K	5%	1/10W
**********					
	* A-1346-923-A	D BOARD, COMPLETE (ES48)			
	* A-1346-924-A	D BOARD, COMPLETE (ES53)			
	* A-1346-925-A	D BOARD, COMPLETE (ES61)			
	* A-1346-937-A	D BOARD, COMPLETE (ES43)			
		**********			
	1-500-048-11	FERRITE	0µH (Q5104)		
	4-363-414-00	SPACER, MICA (IC5302, Q5104)			
	4-382-854-11	SCREW (M3X10), P, SW (+) (D5107, D5108, IC5103, IC5104, IC5105, IC5106, IC5302, Q5104, Q5705)			
	* 4-393-506-01	RETAINER, TR (IC5302)			
	7-682-952-09	SCREW +PSW 3X16 (IC5501, IC5502)			
		<CAPACITOR>			
C5001	1-104-664-11	ELECT	47µF	20%	16V
C5002	1-126-963-11	ELECT	4.7µF	20%	50V
C5011	1-126-934-11	ELECT	220µF	20%	16V
C5020	1-126-961-11	ELECT	2.2µF	20%	50V
C5102	1-102-973-00	CERAMIC	100pF	5%	50V
C5103	1-126-960-11	ELECT	1µF	20%	50V
C5104	1-137-415-11	MYLAR	0.0068µF	10%	100V
C5105	1-102-973-00	CERAMIC	100pF	5%	50V
C5112	1-162-117-00	CERAMIC	100pF	10%	500V
C5113	1-136-207-11	MYLAR	0.047µF	10%	250V
C5115	1-124-347-51	ELECT	100µF	20%	160V
C5117	1-162-116-00	CERAMIC	680pF	10%	2KV

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C5118	1-137-391-11	MYLAR	0.0047µF	5%	100V
C5119	1-162-116-00	CERAMIC	680pF	10%	2KV
C5120	1-162-116-00	CERAMIC	680pF	10%	2KV
C5123	1-129-718-00	FILM	0.022µF	5%	630V
C5127	1-117-643-11	FILM	9100pF	3%	1.2KV
C5130	1-115-521-11	FILM	0.82µF	5%	250V
C5133	1-104-665-11	ELECT	100µF	20%	25V
C5135	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5136	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5137	1-137-043-11	MYLAR	0.0047µF	10%	400V
C5138	1-126-965-11	ELECT	22µF	20%	50V
C5141	1-136-189-00	MYLAR	0.1µF	10%	250V
C5142	1-162-117-00	CERAMIC	100pF	10%	500V
C5143	1-115-521-11	FILM	0.82µF	5%	250V
C5145	1-104-665-11	ELECT	100µF	20%	25V
C5146	1-107-655-11	ELECT	47µF	20%	250V
C5147	1-102-228-00	CERAMIC	470pF	10%	500V
C5148	1-126-941-11	ELECT	470µF	20%	25V
C5149	1-126-941-11	ELECT	470µF	20%	25V
C5150	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5151	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5152	1-126-972-11	ELECT	1000µF	20%	50V
C5153	1-126-972-11	ELECT	1000µF	20%	50V
C5158	1-124-347-51	ELECT	100µF	20%	160V
C5159	1-126-935-11	ELECT	470µF	20%	16V
C5160	1-126-935-11	ELECT	470µF	20%	16V
C5163	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5164	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5165	1-126-967-11	ELECT	47µF	20%	50V
C5166	1-107-909-11	ELECT	47µF	20%	50V
C5167	1-126-967-11	ELECT	47µF	20%	50V
C5168	1-107-909-11	ELECT	47µF	20%	50V
C5170	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C5171	1-106-387-00	MYLAR	0.068µF	10%	200V
C5172	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C5173	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C5174	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C5175	1-126-967-11	ELECT	47µF	20%	50V
C5176	1-126-967-11	ELECT	47µF	20%	50V
C5204	1-126-933-11	ELECT	100µF	20%	16V
C5205	1-130-495-00	MYLAR	0.1µF	5%	50V
C5206	1-126-960-11	ELECT	1µF	20%	50V
C5207	1-126-965-11	ELECT	22µF	20%	50V
C5208	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C5209	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C5211	1-130-495-00	MYLAR	0.1µF	5%	50V
C5214	1-126-935-11	ELECT	470µF	20%	16V
C5215	1-126-964-11	ELECT	10µF	20%	50V
C5216	1-164-096-11	CERAMIC	0.01µF		50V
C5217	1-164-096-11	CERAMIC	0.01µF		50V
C5218	1-164-096-11	CERAMIC	0.01µF		50V
C5219	1-164-096-11	CERAMIC	0.01µF		50V
C5220	1-164-096-11	CERAMIC	0.01µF		50V
C5221	1-164-096-11	CERAMIC	0.01µF		50V
C5222	1-164-096-11	CERAMIC	0.01µF		50V
C5223	1-126-960-11	ELECT	1µF	20%	50V
C5224	1-126-967-11	ELECT	47µF	20%	50V
C5225	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5226	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C5301	1-104-664-11	ELECT	47µF	20%	25V
C5302	1-104-665-11	ELECT	100µF	20%	25V
C5303	1-126-933-11	ELECT	100µF	20%	16V
C5304	1-163-005-11	CERAMIC CHIP	470pF	10%	50V
C5305	1-137-399-11	MYLAR	0.1µF	5%	100V
C5307	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C5308	1-126-960-11	ELECT	1µF	20%	50V
C5310	1-126-964-11	ELECT	10µF	20%	50V
C5311	1-136-177-00	MYLAR	1µF	5%	50V
C5312	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5313	1-126-933-11	ELECT	100µF	20%	16V
C5314	1-126-969-11	ELECT	220µF	20%	50V
C5315	1-126-964-11	ELECT	10µF	20%	50V
C5316	1-137-401-11	MYLAR	0.22µF	10%	100V
C5317	1-104-664-11	ELECT	47µF	20%	16V
C5318	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5319	1-126-941-11	ELECT	470µF	20%	25V
C5320	1-126-972-11	ELECT	1000µF	20%	50V
C5321	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C5323	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5326	1-126-972-11	ELECT	1000µF	20%	50V
C5327	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C5328	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5329	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C5331	1-126-960-11	ELECT	1µF	20%	50V
C5332	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5333	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C5334	1-126-960-11	ELECT	1µF	20%	50V
C5401	1-126-967-11	ELECT	47µF	20%	50V
C5402	1-104-664-11	ELECT	47µF	20%	25V
C5403	1-102-125-00	CERAMIC	0.0047µF	10%	50V
C5404	1-102-125-00	CERAMIC	0.0047µF	10%	50V
C5405	1-102-125-00	CERAMIC	0.0047µF	10%	50V
C5406	1-104-664-11	ELECT	47µF	20%	25V
C5407	1-130-495-00	MYLAR	0.1µF	5%	50V
C5507	1-102-973-00	CERAMIC	100pF	5%	50V
C5508	1-102-973-00	CERAMIC	100pF	5%	50V
C5509	1-102-973-00	CERAMIC	100pF	5%	50V
C5510	1-102-973-00	CERAMIC	100pF	5%	50V
C5511	1-102-973-00	CERAMIC	100pF	5%	50V
C5512	1-102-973-00	CERAMIC	100pF	5%	50V
C5517	1-126-965-11	ELECT	22µF	20%	50V
C5518	1-126-965-11	ELECT	22µF	20%	50V
C5519	1-126-969-11	ELECT	220µF	20%	50V
C5520	1-126-969-11	ELECT	220µF	20%	50V
C5521	1-130-495-00	MYLAR	0.1µF	5%	50V
C5522	1-130-495-00	MYLAR	0.1µF	5%	50V
C5523	1-126-971-11	ELECT	470µF	20%	50V
C5524	1-126-971-11	ELECT	470µF	20%	50V
C5527	1-126-969-11	ELECT	220µF	20%	50V
C5528	1-126-969-11	ELECT	220µF	20%	50V
C5529	1-137-150-11	MYLAR	0.01µF	5%	50V
C5530	1-137-150-11	MYLAR	0.01µF	5%	50V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C5711	1-136-165-00	MYLAR 0.1µF 5% 50V	
C5712	1-136-177-00	MYLAR 1µF 5% 50V	
C5713	1-104-665-11	ELECT 100µF 20% 25V	
C5714	1-130-471-00	MYLAR 0.001µF 5% 50V	
C5715	1-137-150-11	MYLAR 0.01µF 5% 50V	
C5716	1-104-665-11	ELECT 100µF 20% 25V	
C5717	1-126-968-11	ELECT 100µF 20% 50V	
C5718	1-162-114-00	CERAMIC 0.0047µF 2KV	
C5719	1-126-968-11	ELECT 100µF 20% 50V	
C5720	1-137-372-11	MYLAR 0.022µF 5% 50V	
C5721	1-104-661-91	ELECT 330µF 20% 16V	
C5722	1-126-934-11	ELECT 220µF 20% 16V	
C5727	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C5728	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C5759	1-126-964-11	ELECT 10µF 20% 50V	
C5760	1-164-182-11	CERAMIC CHIP 0.0033µF 10% 50V	
		<CONNECTOR>	
CN5001	*1-564-506-11	PLUG, CONNECTOR 3P	
CN5002	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
CN5003	*1-506-371-00	PIN, CONNECTOR 2P	
CN5004	1-695-915-11	TAB (CONTACT)	
CN5006	*1-564-512-11	PLUG, CONNECTOR 9P	
CN5007	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN5008	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN5009	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN5010	*1-564-507-11	PLUG, CONNECTOR 4P	
CN5011	*1-564-507-11	PLUG, CONNECTOR 4P	
CN5012	*1-564-507-11	PLUG, CONNECTOR 4P	
CN5013	*1-764-333-11	PLUG, CONNECTOR 10P	
CN5014	*1-691-135-11	PIN, CONNECTOR (PC BOARD) 4P	
CN5015	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN5016	1-900-903-64	CONNECTOR ASSY 20P	
CN5017	1-900-903-64	CONNECTOR ASSY 20P	
CN5018	*1-564-511-11	PLUG, CONNECTOR 8P	
CN5019	*1-564-507-11	PLUG, CONNECTOR 4P	
CN5020	*1-564-506-11	PLUG, CONNECTOR 3P	
CN5402	*1-691-616-21	CONNECTOR, BOARD TO BOARD 15P	
		<DIODE>	
D5001	8-719-991-33	DIODE 1SS133T-77	
D5002	8-719-991-33	DIODE 1SS133T-77	
D5006	8-719-991-33	DIODE 1SS133T-77	
D5008	8-719-991-33	DIODE 1SS133T-77	
D5101	8-719-983-38	DIODE MTZJ-T-77-36B	
D5107	8-719-979-99	DIODE ERD08M-15	
D5108	8-719-052-09	DIODE FMG-36S-LF024-104	
D5114	8-719-971-20	DIODE ERC38-06	
D5115	8-719-302-43	DIODE EL1Z	
D5116	8-719-979-85	DIODE EGP20G	
D5117	8-719-302-43	DIODE EL1Z	
D5118	8-719-979-85	DIODE EGP20G	
D5121	8-719-979-85	DIODE EGP20G	
D5122	8-719-979-85	DIODE EGP20G	
D5201	8-719-991-33	DIODE 1SS133T-77	
D5202	8-719-109-85	DIODE RD5.1ESB2	
D5203	8-719-923-86	DIODE MTZJ-T-77-15	
D5204	8-719-921-63	DIODE MTZJ-7.5B	
D5205	8-719-991-33	DIODE 1SS133T-77	
D5207	8-719-991-33	DIODE 1SS133T-77	
D5208	8-719-991-33	DIODE 1SS133T-77	
D5301	8-719-923-86	DIODE MTZJ-T-77-15	
D5302	8-719-991-33	DIODE 1SS133T-77	
D5303	8-719-908-03	DIODE GP08D	
D5304	8-719-908-03	DIODE GP08D	
D5305	8-719-991-33	DIODE 1SS133T-77	
D5306	8-719-923-86	DIODE MTZJ-T-77-15	
D5307	8-719-923-86	DIODE MTZJ-T-77-15	
D5308	8-719-924-16	DIODE MTZJ-T-77-24	
D5309	8-719-924-16	DIODE MTZJ-T-77-24	
D5401	8-719-110-17	DIODERD10ESB2	
D5402	8-719-982-96	DIODE MTZJ-T-77-2.2A	
D5701	8-719-991-33	DIODE 1SS133T-77	
D5704	8-719-991-33	DIODE 1SS133T-77	
D5719	8-719-923-86	DIODE MTZJ-T-77-15	
D5721	8-719-923-86	DIODE MTZJ-T-77-15	
D5724	8-719-018-82	DIODE RGP02-20EL-6394	
D5726	8-719-991-33	DIODE 1SS133T-77	
D5727	8-719-991-33	DIODE 1SS133T-77	
D5732	8-719-991-33	DIODE 1SS133T-77	
		<FERRITBEAD>	
FB5102	1-412-911-11	FERRITE 0µH	
FB5103	1-412-911-11	FERRITE 0µH	
		<IC>	
IC5103	8-759-701-79	IC NJM7812FA	
IC5104	8-759-929-65	IC LM7912CT	
IC5105	8-759-701-56	IC NJM78M05FA	
IC5106	8-759-701-84	IC NJM7905FA	
IC5107	8-759-701-59	IC NJM78M09FA	
IC5201	8-759-085-67	IC LM339NS	
IC5301	8-759-251-31	IC CA0007AM	
IC5302	8-759-192-71	IC STV9379	
IC5303	8-759-998-98	IC LM358D	
IC5401	8-759-711-28	IC NJM2058D	
IC5501	8-749-014-67	IC STK392-020	
IC5502	8-749-014-67	IC STK392-020	
IC5703	8-759-711-28	IC NJM2058D	
		<CHIP CONDUCTOR>	
JR5301	1-216-295-91	SHORT 0	
JR5303	1-216-295-91	SHORT 0	
		<COIL>	
L5101	1-406-665-11	INDUCTOR 100µH	
L5105	1-459-111-00	INDUCTOR 10mH	
L5107	1-412-533-21	INDUCTOR 47µH	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK
L5108	1-412-533-21	INDUCTOR 47µH	
L5109	1-412-519-11	INDUCTOR 3.3µH	
L5201	1-414-187-11	INDUCTOR 47µH	
L5301	1-412-524-11	INDUCTOR 8.2µH	
L5501	1-412-533-21	INDUCTOR 47µH	
L5502	1-412-533-21	INDUCTOR 47µH	
L5503	1-412-533-21	INDUCTOR 47µH	
L5504	1-412-533-21	INDUCTOR 47µH	
		<NEON LAMP>	
NL5101	1-517-778-21	LAMP, NEON	
NL5102	1-517-778-21	LAMP, NEON	
NL5103	1-517-778-21	LAMP, NEON	
NL5402	1-517-778-21	LAMP, NEON	
		<IC LINK>	
PS5101⚠	1-533-590-31	LINK, IC (1A/90V AC, 60V DC)	
PS5501⚠	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)	
PS5502⚠	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)	
PS5503⚠	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)	
PS5504⚠	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)	
PS5539⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
PS5540⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
PS5543⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
PS5544⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
PS5549⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
PS5550⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
		<TRANSISTOR>	
Q5006	1-801-806-11	TRANSISTOR DTC144EKA	
Q5009	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q5102	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q5104	8-729-051-81	TRANSISTOR 2SC5047-YB	
Q5105	8-729-038-83	TRANSISTOR 2SK2251-01-F19	
Q5106	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q5201	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5302	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q5303	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5401	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5402	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5403	1-801-806-11	TRANSISTOR DTC144EKA	
Q5501	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5502	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5503	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q5504	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5505	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q5506	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5704	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5705	8-729-053-73	TRANSISTOR 2SC5022	
Q5706	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q5707	8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
Q5710	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q5711	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R5004	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5013	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5023	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5048	1-216-041-00	RES-CHIP	470	5%	1/10W
R5101	1-215-926-00	METAL OXIDE	33K	5%	3W
R5112	1-247-843-11	CARBON	3.3K	5%	1/4W
R5115	1-216-435-11	METAL OXIDE	2.7K	5%	1W
R5119	1-215-922-11	METAL OXIDE	6.8K	5%	3W
R5120	1-216-486-00	METAL OXIDE	8.2K	5%	3W
R5122	1-215-905-11	METAL OXIDE	10	5%	3W
R5136	1-215-443-00	METAL	8.2K	1%	1/4W
R5138	1-215-457-00	METAL	33K	1%	1/4W
R5139	1-216-391-11	METAL OXIDE	1.5	5%	3W
R5140	1-215-449-00	METAL	15K	1%	1/4W
R5141	1-215-911-11	METAL OXIDE	100	5%	3W
R5146	1-215-910-00	METAL OXIDE	68	5%	3W
R5147	1-215-910-00	METAL OXIDE	68	5%	3W
R5148	1-249-377-11	CARBON	0.47	5%	1/4W
R5149	1-247-807-31	CARBON	100	5%	1/4W
R5152	1-216-377-11	METAL OXIDE	4.7	5%	2W
R5153	1-249-379-11	CARBON	0.68	5%	1/4W
R5154	1-260-127-11	CARBON	220K	5%	1/2W
R5155	1-214-909-00	METAL	68K	1%	1/2W
R5157	1-215-908-00	METAL OXIDE	33	5%	3W (ES43,ES48)
R5157	1-216-474-11	METAL OXIDE	33	5%	3W (ES53)
R5157	1-216-472-00	METAL OXIDE	33	5%	3W (ES61)
R5158	1-216-349-00	METAL OXIDE	1	5%	1W
R5159	1-215-908-00	METAL OXIDE	33	5%	3W (ES43,ES48)
R5159	1-216-474-11	METAL OXIDE	33	5%	3W (ES53)
R5159	1-216-472-00	METAL OXIDE	33	5%	3W (ES61)
R5160	1-249-377-11	CARBON	0.47	5%	1/4W
R5161	1-249-377-11	CARBON	0.47	5%	1/4W
R5162	1-216-393-00	METAL OXIDE	2.2	5%	3W
R5163	1-216-392-11	METAL OXIDE	1.8	5%	3W
R5164	1-249-393-11	CARBON	10	5%	1/4W
R5166	1-215-905-11	METAL OXIDE	10	5%	3W
R5169	1-249-424-11	CARBON	3.9K	5%	1/4W
R5171	1-249-429-11	CARBON	10K	5%	1/4W
R5172	1-249-417-11	CARBON	1K	5%	1/4W
R5173	1-215-905-11	METAL OXIDE	10	5%	3W
R5174	1-215-905-11	METAL OXIDE	10	5%	3W
R5175	1-215-905-11	METAL OXIDE	10	5%	3W
R5201	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R5202	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5203	1-215-879-11	METAL OXIDE	47K	5%	1W
R5204	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R5205	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R5206	1-208-837-11	METAL CHIP	200K	0.5%	1/10W
R5209	1-208-760-11	METAL CHIP	120	0.5%	1/10W
R5210	1-216-113-00	RES-CHIP	470K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R5211	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5212	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R5213	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5214	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5215	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5216	1-247-895-91	CARBON	470K	5%	1/4W
R5217	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R5218	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5219	1-216-075-00	RES-CHIP	12K	5%	1/10W
R5220	1-216-105-91	RES-CHIP	220K	5%	1/10W
R5221	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R5222	1-216-105-91	RES-CHIP	220K	5%	1/10W
R5223	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5224	1-249-405-11	CARBON	100	5%	1/4W
R5225	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R5226	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5227	1-260-135-11	CARBON	1M	5%	1/2W
R5229	1-216-045-00	RES-CHIP	680	5%	1/10W
R5230	1-216-097-91	RES-CHIP	100K	5%	1/10W
R5231	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5232	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5233	1-247-807-31	CARBON	100	5%	1/4W
R5234	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5235	1-208-810-11	METAL CHIP	15K	0.5%	1/10W
R5236	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5302	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5303	1-216-083-00	RES-CHIP	27K	5%	1/10W
R5304	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5305	1-208-801-11	METAL CHIP	6.2K	0.5%	1/10W
R5306	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R5307	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5308	1-216-353-00	METAL OXIDE	2.2	5%	1W
R5309	1-216-097-91	RES-CHIP	100K	5%	1/10W
R5310	1-216-353-00	METAL OXIDE	2.2	5%	1W
R5311	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5312	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5313	1-216-083-00	RES-CHIP	27K	5%	1/10W
R5314	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5315	1-215-913-11	METAL OXIDE	220	5%	3W
R5316	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5317	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5318	1-216-097-91	RES-CHIP	100K	5%	1/10W
R5319	1-216-085-00	RES-CHIP	33K	5%	1/10W
R5320	1-249-383-11	CARBON	1.5	5%	1/4W
R5321	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5323	1-216-083-00	RES-CHIP	27K	5%	1/10W
R5325	1-208-801-11	METAL CHIP	6.2K	0.5%	1/10W
R5326	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R5328	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5329	1-216-025-91	RES-CHIP	100	5%	1/10W
R5330	1-216-295-91	SHORT	0		
R5331	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5335	1-216-117-00	RES-CHIP	680K	5%	1/10W
R5337	1-216-117-00	RES-CHIP	680K	5%	1/10W
R5338	1-216-295-91	SHORT	0		
R5339	1-247-807-31	CARBON	100	5%	1/4W
R5340	1-249-377-11	CARBON	0.47	5%	1/4W
R5341	1-249-377-11	CARBON	0.47	5%	1/4W
R5344	1-216-117-00	RES-CHIP	680K	5%	1/10W
R5345	1-216-117-00	RES-CHIP	680K	5%	1/10W
R5401	1-216-295-91	SHORT	0		
R5405	1-260-087-11	CARBON	100	5%	1/2W
R5406	1-216-295-91	SHORT	0		
R5408	1-216-295-91	SHORT	0		
R5409	1-216-295-91	SHORT	0		
R5410	1-260-087-11	CARBON	100	5%	1/2W
R5411	1-216-295-91	SHORT	0		
R5412	1-208-812-11	METAL CHIP	18K	0.5%	1/10W
R5415	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R5416	1-216-295-91	SHORT	0		
R5419	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5420	1-216-077-91	RES-CHIP	15K	5%	1/10W
R5421	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5422	1-216-105-91	RES-CHIP	220K	5%	1/10W
R5501	1-247-807-31	CARBON	100	5%	1/4W
R5502	1-247-807-31	CARBON	100	5%	1/4W
R5503	1-247-807-31	CARBON	100	5%	1/4W
R5504	1-247-807-31	CARBON	100	5%	1/4W
R5505	1-247-807-31	CARBON	100	5%	1/4W
R5506	1-247-807-31	CARBON	100	5%	1/4W
R5507	1-247-843-11	CARBON	3.3K	5%	1/4W
R5508	1-247-843-11	CARBON	3.3K	5%	1/4W
R5509	1-247-843-11	CARBON	3.3K	5%	1/4W
R5510	1-247-843-11	CARBON	3.3K	5%	1/4W
R5511	1-249-417-11	CARBON	1K	5%	1/4W
R5512	1-249-417-11	CARBON	1K	5%	1/4W
R5513	1-247-843-11	CARBON	3.3K	5%	1/4W
R5515	1-247-843-11	CARBON	3.3K	5%	1/4W
R5517	1-249-417-11	CARBON	1K	5%	1/4W
R5518	1-249-417-11	CARBON	1K	5%	1/4W
R5519	1-249-429-11	CARBON	10K	5%	1/4W
R5520	1-249-429-11	CARBON	10K	5%	1/4W
R5521	1-214-808-11	METAL	4.7	1%	1/2W
R5522	1-214-808-11	METAL	4.7	1%	1/2W
R5523	1-247-807-31	CARBON	100	5%	1/4W
R5524	1-249-429-11	CARBON	10K	5%	1/4W
R5525	1-214-808-11	METAL	4.7	1%	1/2W
R5526	1-247-807-31	CARBON	100	5%	1/4W
R5527	1-214-808-11	METAL	4.7	1%	1/2W
R5528	1-249-429-11	CARBON	10K	5%	1/4W
R5529	1-214-808-11	METAL	4.7	1%	1/2W
R5530	1-214-808-11	METAL	4.7	1%	1/2W
R5531	1-249-417-11	CARBON	1K	5%	1/4W
R5532	1-249-417-11	CARBON	1K	5%	1/4W
R5533	1-214-808-11	METAL	4.7	1%	1/2W
R5534	1-214-808-11	METAL	4.7	1%	1/2W
R5535	1-214-808-11	METAL	4.7	1%	1/2W
R5536	1-214-808-11	METAL	4.7	1%	1/2W
R5537	1-214-808-11	METAL	4.7	1%	1/2W
R5538	1-214-808-11	METAL	4.7	1%	1/2W
R5541	1-214-808-11	METAL	4.7	1%	1/2W
R5542	1-214-808-11	METAL	4.7	1%	1/2W

KP-ES43HK1/ME1/MN1/SN1, ES48HK1/ME1/MN1/SN1, ES53HK1/ME1/MN1/SN1, ES61HK1/ME1/MN1/SN1 RM-961

D G1, G

• The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R5545	1-214-808-11	METAL	4.7	1%	1/2W
R5546	1-214-808-11	METAL	4.7	1%	1/2W
R5547	1-214-808-11	METAL	4.7	1%	1/2W
R5548	1-214-808-11	METAL	4.7	1%	1/2W
R5551	1-214-808-11	METAL	4.7	1%	1/2W
R5552	1-214-808-11	METAL	4.7	1%	1/2W
R5553	1-214-808-11	METAL	4.7	1%	1/2W
R5554	1-214-808-11	METAL	4.7	1%	1/2W
R5555	1-214-808-11	METAL	4.7	1%	1/2W
R5556	1-214-808-11	METAL	4.7	1%	1/2W
R5557	1-214-808-11	METAL	4.7	1%	1/2W
R5558	1-214-808-11	METAL	4.7	1%	1/2W
R5559	1-214-808-11	METAL	4.7	1%	1/2W
R5560	1-214-808-11	METAL	4.7	1%	1/2W
R5561	1-214-808-11	METAL	4.7	1%	1/2W
R5562	1-214-808-11	METAL	4.7	1%	1/2W
R5563	1-249-429-11	CARBON	10K	5%	1/4W
R5564	1-249-429-11	CARBON	10K	5%	1/4W
R5565	1-249-429-11	CARBON	10K	5%	1/4W
R5566	1-249-429-11	CARBON	10K	5%	1/4W
R5567	1-249-429-11	CARBON	10K	5%	1/4W
R5568	1-249-429-11	CARBON	10K	5%	1/4W
R5569	1-249-429-11	CARBON	10K	5%	1/4W
R5570	1-249-429-11	CARBON	10K	5%	1/4W
R5723	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5724	1-247-807-31	CARBON	100	5%	1/4W
R5725	1-216-093-91	RES-CHIP	68K	5%	1/10W
R5726	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R5727	1-216-085-00	RES-CHIP	33K	5%	1/10W
R5728	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R5729	1-216-025-91	RES-CHIP	100	5%	1/10W
R5730	1-249-431-11	CARBON	15K	5%	1/4W
R5731	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5732	1-249-441-11	CARBON	100K	5%	1/4W
R5734	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R5735	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5737	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5738	1-249-405-11	CARBON	100	5%	1/4W
R5739	1-216-025-91	RES-CHIP	100	5%	1/10W
R5740	1-215-917-11	METAL OXIDE	1K	5%	3W
R5744	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5745	1-216-099-00	RES-CHIP	120K	5%	1/10W
R5746	1-215-925-11	METAL OXIDE	22K	5%	3W
R5747	1-215-925-11	METAL OXIDE	22K	5%	3W
R5748	1-216-041-00	RES-CHIP	470	5%	1/10W
R5749	1-216-025-91	RES-CHIP	100	5%	1/10W
R5750	1-216-025-91	RES-CHIP	100	5%	1/10W
R5751	1-260-099-11	CARBON	1K	5%	1/2W
R5753	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5754	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5755	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5756	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5757	1-219-752-11	CARBON	100K	5%	1/2W
R5758	1-215-925-11	METAL OXIDE	22K	5%	3W
R5759	1-215-925-11	METAL OXIDE	22K	5%	3W
R5762	1-219-743-11	CARBON	100	5%	1/2W
R5763	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5768	1-249-429-11	CARBON	10K	5%	1/4W
R5769	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5770	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5771	1-216-097-91	RES-CHIP	100K	5%	1/10W
R5772	1-249-429-11	CARBON	10K	5%	1/4W
⋈R9901 ⚠		METAL			1/4W
		<SPARK GAP>			
SG5702	1-519-466-11	GAP, SPARK			
		<TRANSFORMER>			
T5101	1-437-209-11	TRANSFORMER, HORIZONTAL DRIVE			
T5102	1-419-553-11	COIL,HORIZONTAL LINEARITY(HLC)			
T5103	⚠1-453-335-11	TRANSFORMER ASSY, FLY BACK			(NX-4010//M3P4)
T5104	1-435-439-11	TRANSFORMER, FERRITE (PMT)			
**********					
	*A-1316-514-A	G1 BOARD, COMPLETE (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)			
	*A-1316-528-A	G BOARD, COMPLETE (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)			
		**********			
	*1-533-725-11	HOLDER, FUSE (F6001)			
	*4-374-846-01	COVER, CAPACITOR, CAP TYPE (VD6001, VD6002)			
	4-382-854-11	SCREW (M3X10), P, SW (+) (D6015 : G BOARD, D6301, D6302, D6304, D6308, D6309, IC6004)			
		<CAPACITOR>			
C6000	⚠1-104-708-51	MYLAR	0.47µF	20%	250V
C6001	1-163-251-11	CERAMIC CHIP	100pF	5%	50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
C6003	⚠1-104-706-51	MYLAR	0.22µF	20%	250V
C6006	1-126-961-11	ELECT	2.2µF	20%	50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
C6007	1-163-251-11	CERAMIC CHIP	100pF	5%	50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
C6008	1-163-251-11	CERAMIC CHIP	100pF	5%	50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
C6009	⚠1-104-706-51	MYLAR	0.22µF	20%	250V
C6010	⚠1-119-894-51	CERAMIC	2200pF	20%	250V
C6011	⚠1-119-894-51	CERAMIC	2200pF	20%	250V
C6013	⚠1-161-964-91	CERAMIC	0.0047µF		250V
C6014	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
C6015	⚠1-161-964-91	CERAMIC	0.0047µF		250V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

KP-ES43HK1/ME1/MN1/SN1, ES48HK1/ME1/MN1/SN1, ES53HK1/ME1/MN1/SN1, ES61HK1/ME1/MN1/SN1

RM-961

G1, G

REF.NO.	PART NO.	DESCRIPTION	REMARK
C6016	1-163-251-11	CERAMIC CHIP 100pF 5% 50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6017	⚠1-161-964-51	CERAMIC 0.0047µF 250V	
C6018	⚠1-161-964-51	CERAMIC 0.0047µF 250V	
C6019	1-126-961-11	ELECT 2.2µF 20% 50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6020	1-126-968-11	ELECT 100µF 20% 50V	
C6022	1-109-834-11	ELECT(BLOCK) 1500µF 20% 250V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6022	1-131-940-11	ELECT 1200µF 20% 250V (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6023	1-109-834-11	ELECT(BLOCK) 1500µF 20% 250V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6023	1-131-940-11	ELECT 1200µF 20% 250V (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6024	1-117-227-11	MYLAR 1µF 10% 450V (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6025	1-115-389-11	FILM 0.018µF 3% 800V	
C6026	1-125-969-91	CERAMIC 680pF 10% 1KV	
C6027	1-115-824-11	ELECT 18µF 20% 50V	
C6028	1-104-588-11	FILM 0.0082µF 2.50% 1.25KV	
C6029	1-102-106-00	CERAMIC 100pF 10% 50V	
C6030	1-136-189-00	MYLAR 0.1µF 10% 250V	
C6031	1-125-969-91	CERAMIC 680pF 10% 1KV	
C6032	1-115-405-11	FILM 0.039µF 3% 1KV (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6033	1-126-963-11	ELECT 4.7µF 20% 50V	
C6034	1-130-029-00	FILM 8200pF 2% 50V	
C6035	1-104-665-11	ELECT 100µF 20% 25V	
C6036	1-107-906-11	ELECT 10µF 20% 50V	
C6037	1-137-150-11	MYLAR 0.01µF 5% 50V	
C6038	1-104-588-11	FILM 0.0082µF 2.50% 1.25KV	
C6039	1-115-389-11	FILM 0.018µF 3% 800V	
C6040	1-117-227-11	MYLAR 1µF 10% 450V (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6041	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C6042	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C6043	1-104-663-11	ELECT 33µF 20% 16V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6044	1-117-703-11	CERAMIC 0.0047µF 99% 250V	
C6045	1-107-675-11	ELECT 1µF 20% 450V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6046	1-107-675-11	ELECT 1µF 20% 450V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6100	⚠1-161-964-51	CERAMIC 0.0047µF 250V	
C6101	1-107-680-11	ELECT 22µF 20% 450V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6101	1-107-679-91	ELECT 10µF 20% 450V (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6102	⚠1-161-964-51	CERAMIC 0.0047µF 250V	
C6103	1-163-005-11	CERAMIC CHIP 470pF 10% 50V	
C6104	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C6105	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C6106	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6106	1-163-275-11	CERAMIC CHIP 0.001µF 5% 50V (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6107	1-137-605-11	MYLAR 0.01µF 10% 250V	
C6108	⚠1-161-964-51	CERAMIC 0.0047µF 250V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6109	1-104-665-11	ELECT 100µF 20% 25V (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
C6109	1-126-965-11	ELECT 22µF 20% 50V (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)	
C6110	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C6111	⚠1-161-964-51	CERAMIC 0.0047µF 250V	
C6300	1-101-810-00	CERAMIC 100pF 5% 500V	
C6301	1-101-810-00	CERAMIC 100pF 5% 500V	
C6302	1-102-114-00	CERAMIC 470pF 10% 50V	
C6303	1-102-114-00	CERAMIC 470pF 10% 50V	
C6306	1-101-810-00	CERAMIC 100pF 5% 500V	
C6307	1-126-943-11	ELECT 2200µF 20% 25V	
C6308	1-126-937-11	ELECT 4700µF 20% 16V	
C6309	1-101-810-00	CERAMIC 100pF 5% 500V	
C6310	1-101-810-00	CERAMIC 100pF 5% 500V	
C6311	1-104-665-11	ELECT 100µF 20% 25V	
C6312	1-104-665-11	ELECT 100µF 20% 25V	
C6313	1-126-960-11	ELECT 1µF 20% 50V	
C6314	1-128-567-51	ELECT 1000µF 20% 100V	
C6315	1-128-567-51	ELECT 1000µF 20% 100V	
C6317	1-109-954-11	ELECT 0.47µF 20% 160V	
C6321	1-128-549-11	ELECT 3300µF 20% 35V	
C6322	1-128-549-11	ELECT 3300µF 20% 35V	
C6323	1-128-549-11	ELECT 3300µF 20% 35V	
C6324	1-128-549-11	ELECT 3300µF 20% 35V	
C6325	1-126-935-11	ELECT 470µF 20% 6.3V	
C6327	1-126-968-11	ELECT 100µF 20% 50V	
C6328	1-126-968-11	ELECT 100µF 20% 50V	
C6329	1-126-943-11	ELECT 2200µF 20% 25V	
C6330	1-126-943-11	ELECT 2200µF 20% 25V	
C6331	1-107-641-11	ELECT 220µF 20% 160V	
C6332	1-104-665-11	ELECT 100µF 20% 25V	
C6333	1-104-665-11	ELECT 100µF 20% 25V	
C6334	1-126-940-11	ELECT 330µF 20% 25V	
C6335	1-126-967-11	ELECT 47µF 20% 50V	
C6337	1-101-810-00	CERAMIC 100pF 5% 500V	
C6338	1-162-117-00	CERAMIC 100pF 10% 500V	
C6339	1-104-987-11	MYLAR 0.001µF 10% 200V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

G1, G

REF.NO.	PART NO.	DESCRIPTION	REMARK
C6340	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
C6341	1-137-150-11	MYLAR 0.01µF 5% 50V	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
C6342	1-136-165-00	MYLAR 0.1µF 5% 50V	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
		<CONNECTOR>	
CN6002	1-695-915-11	TAB (CONTACT)	
CN6004 *	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
CN6004 *	1-580-843-11	PIN, CONNECTOR (POWER)	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
CN6006 *	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN6007 *	1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
CN6011 *	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN6300 *	1-564-508-11	PLUG, CONNECTOR 5P	
CN6301 *	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN6302 *	1-764-333-11	PLUG, CONNECTOR 10P	
CN6303 *	1-764-333-11	PLUG, CONNECTOR 10P	
CN6304 *	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
CN6306	1-695-915-11	TAB (CONTACT)	
CN6307	1-695-915-11	TAB (CONTACT)	
CN6308	1-695-915-11	TAB (CONTACT)	
		<DIODE>	
D6000	8-719-052-90	DIODE D1NL40-TA2	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6001	8-719-052-90	DIODE D1NL40-TA2	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6002	8-719-988-61	DIODE 1SS355TE-17	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6003	8-719-158-49	DIODE RD12SB2	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6004	8-719-991-33	DIODE 1SS133T-77	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6005	8-719-988-61	DIODE 1SS355TE-17	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6006	8-719-988-61	DIODE 1SS355TE-17	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6007	8-719-988-61	DIODE 1SS355TE-17	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6008	8-719-991-33	DIODE 1SS133T-77	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6009	8-719-158-49	DIODE RD12SB2	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6010	8-719-988-61	DIODE 1SS355TE-17	
D6011	8-719-988-61	DIODE 1SS355TE-17	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6015	⚠8-719-022-99	DIODE D6SB60L	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6015	⚠8-719-510-53	DIODE D4SB60L	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6017	8-719-063-73	DIODE D1NL20U-TR	
D6019	8-719-510-02	DIODE D1NS4	
D6020	8-719-029-04	DIODE D5L60	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6021	8-719-921-88	DIODE MTZJ-13B	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6021	8-719-110-36	DIODE RD13ES-B2	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6022	8-719-979-64	DIODE UF4005PKG23	
D6023	8-719-979-64	DIODE UF4005PKG23	
D6024	8-719-988-61	DIODE 1SS355TE-17	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6025	8-719-988-61	DIODE 1SS355TE-17	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6100	⚠8-719-077-76	DIODE D2SB60A-F04	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6100	⚠8-719-068-00	DIODE ERC04-06SE	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6101	8-719-068-00	DIODE ERC04-06SE	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6101	8-719-947-69	DIODE MTZJ-T-72-18B	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6102	8-719-978-65	DIODE DTZ-TT11-15B	
D6103	8-719-988-61	DIODE 1SS355TE-17	
D6104	⚠8-719-068-00	DIODE ERC04-06SE	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6105	8-719-948-45	DIODE ERA22-08	
D6106	⚠8-719-068-00	DIODE ERC04-06SE	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6108	8-719-063-73	DIODE D1NL20U-TR	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
D6108	8-719-510-48	DIODE D1N20R	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6300	8-719-057-96	DIODE D10SC6M-4012	
D6301	8-719-510-12	DIODE D10SC4M	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D6302	8-719-312-47	DIODE RBA-406B	
D6303	8-719-063-73	DIODE D1NL20U-TR	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6304	8-719-050-18	DIODE D4SBL20U	
D6305	8-719-988-61	DIODE 1SS355TE-17	
D6306	8-719-988-61	DIODE 1SS355TE-17	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6307	8-719-988-61	DIODE 1SS355TE-17	
D6308	8-719-988-31	DIODE D10SC6MR	
D6309	8-719-057-96	DIODE D10SC6M-4012	
D6310	8-719-052-91	DIODE D4SBS4-F	
D6311	8-719-988-61	DIODE 1SS355TE-17	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
D6312	8-719-988-61	DIODE 1SS355TE-17	
D6315	8-719-988-61	DIODE 1SS355TE-17	
D6316	8-719-988-61	DIODE 1SS355TE-17	
D6317	8-719-988-61	DIODE 1SS355TE-17	
D6318	8-719-921-88	DIODE MTZJ-13B	
D6319	8-719-976-96	DIODE DTZ4.7C	
D6320	8-719-976-96	DIODE DTZ4.7C	
D6323	8-719-032-12	DIODE D1NS6	
		<FUSE>	
F6001	⚠1-532-506-51	FUSE 6.3A/250V	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
F6001	⚠1-576-232-11	FUSE (H.B.C.) 5A/250V	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
		<FERRITBEAD>	
FB6002	1-412-911-11	FERRITE 0µH	
FB6101	⚠1-412-911-21	FERRITE 0µH	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
FB6103	⚠1-412-911-21	FERRITE 0µH	
FB6301	1-412-911-11	FERRITE 0µH	
FB6302	1-412-911-11	FERRITE 0µH	
FB6303	1-412-911-11	FERRITE 0µH	
FB6304	1-412-911-11	FERRITE 0µH	
FB6305	1-412-911-11	FERRITE 0µH	
FB6306	1-412-911-11	FERRITE 0µH	
FB6309	1-412-911-11	FERRITE 0µH	
FB6310	1-412-911-11	FERRITE 0µH	
		<IC>	
IC6000	8-759-198-31	IC µPC1093J-1-T	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
IC6001	8-759-133-90	IC µPC339C	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
IC6002	⚠8-749-924-35	PHOTO COUPLER ON3171-R	
IC6003	⚠8-749-924-35	PHOTO COUPLER ON3171-R	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
IC6004	8-749-016-66	IC MCR5152	
IC6005	⚠8-749-924-35	PHOTO COUPLER ON3171-R	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
IC6006	8-759-198-31	IC µPC1093J-1-T	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
IC6007	⚠8-749-924-35	PHOTO COUPLER ON3171-R	
IC6301	8-749-012-13	IC DM-58	
IC6302	8-759-663-29	IC MM1476AF(TP)	
IC6303	8-759-198-31	IC µPC1093J-1-T	
IC6304	8-759-908-15	IC TL431CLP	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
		<COIL>	
L6303	1-412-525-31	INDUCTOR 10µH	
L6304	1-406-659-11	INDUCTOR 10µH	
L6307	1-412-525-31	INDUCTOR 10µH	
L6308	1-412-525-31	INDUCTOR 10µH	
L6309	1-412-525-31	INDUCTOR 10µH	
L6310	1-412-525-31	INDUCTOR 10µH	
L6311	1-412-525-31	INDUCTOR 10µH	
L6314	1-412-524-11	INDUCTOR 8.2µH	
L6315	1-412-524-11	INDUCTOR 8.2µH	
		<IC LINK>	
PS6300	⚠1-801-549-21	PROTECTOR, MODULE (4.0A)	
PS6301	⚠1-801-549-21	PROTECTOR, MODULE (4.0A)	
PS6302	⚠1-801-549-21	PROTECTOR, MODULE (4.0A)	
PS6303	⚠1-801-549-21	PROTECTOR, MODULE (4.0A)	
PS6306	⚠1-801-550-21	PROTECTOR, MODULE (2.5A)	
PS6307	⚠1-801-550-21	PROTECTOR, MODULE (2.5A)	
PS6310	⚠1-801-550-21	PROTECTOR, MODULE (2.5A)	
PS6311	⚠1-801-550-21	PROTECTOR, MODULE (2.5A)	
		<TRANSISTOR>	
Q6000	8-729-120-28	TRANSISTOR 2SC1623-L5L6	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
Q6002	8-729-140-97	TRANSISTOR 2SB734-34	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
Q6003	8-729-120-28	TRANSISTOR 2SC1623-L5L6	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
Q6004	8-729-140-93	TRANSISTOR 2SB733-34	
Q6005	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
Q6100	8-729-046-40	TRANSISTOR 2SK2663	
Q6102	8-729-023-22	TRANSISTOR 2SD2114K	

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G1, G

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q6300	8-729-120-28	TRANSISTOR 2SC1623-L5L6	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
Q6300	8-729-023-22	TRANSISTOR 2SD2114K	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
Q6301	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6302	8-729-026-49	TRANSISTOR 2SA1037AK-T-146-R	
Q6303	8-729-820-82	TRANSISTOR 2SA1208	
Q6304	8-729-026-39	TRANSISTOR 2SA933AS-QT	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
		<RESISTOR>	
R6000	1-260-131-11	CARBON 470K 5% 1/2W	
R6001	1-260-131-11	CARBON 470K 5% 1/2W	
R6002	1-202-981-11	CEMENTED 0.82 5% 20W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6002	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6003	⚠1-219-759-91	CARBON 1M 5% 1/2W	
R6004	1-208-806-11	METAL CHIP 10K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6005	1-208-806-11	METAL CHIP 10K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6006	1-208-832-11	METAL CHIP 120K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6007	1-208-827-11	METAL CHIP 75K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6008	1-215-489-00	METAL 680K 1% 1/4W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6009	1-215-489-00	METAL 680K 1% 1/4W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6010	1-215-489-00	METAL 680K 1% 1/4W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6011	1-208-798-11	METAL CHIP 4.7K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6012	1-208-832-11	METAL CHIP 120K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6013	1-215-489-00	METAL 680K 1% 1/4W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6014	1-215-489-00	METAL 680K 1% 1/4W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6015	1-215-489-00	METAL 680K 1% 1/4W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6016	1-216-081-00	RES-CHIP 22K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6017	1-208-830-11	METAL CHIP 100K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6018	1-208-844-11	METAL CHIP 390K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6019	1-208-806-11	METAL CHIP 10K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6020	1-208-827-11	METAL CHIP 75K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6021	1-208-830-11	METAL CHIP 100K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6022	1-208-846-11	METAL CHIP 470K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6023	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6024	1-208-846-11	METAL CHIP 470K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6025	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6026	⚠1-218-265-21	METAL 8.2M 5% 1W	
R6027	1-249-389-11	CARBON 4.7 5% 1/4W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6029	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6030	1-216-089-91	RES-CHIP 47K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6031	1-216-073-00	RES-CHIP 10K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6033	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6035	⚠1-205-998-11	CEMENTED 1 5% 10W	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6036	1-208-830-11	METAL CHIP 100K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6038	1-216-073-00	RES-CHIP 10K 5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6041	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6042	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6043	1-216-073-00	RES-CHIP 10K 5% 1/10W	

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G1, G

REF.NO.	PART NO.	DESCRIPTION			REMARK
R6044	1-216-073-00	RES-CHIP	10K	5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6045	1-208-819-11	METAL CHIP	36K	0.5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6046	1-215-489-00	METAL	680K	1%	1/4W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6047	1-215-489-00	METAL	680K	1%	1/4W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6048	1-215-489-00	METAL	680K	1%	1/4W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6049	⚠1-205-998-11	CEMENTED	1	5%	10W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6050	1-205-943-11	CEMENTED	1	5%	20W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6051	1-208-824-11	METAL CHIP	56K	0.5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6052	1-249-417-11	CARBON	1K	5%	1/4W
R6053	1-208-792-11	METAL CHIP	2.7K	0.5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6053	1-216-660-11	METAL CHIP	2.4K	0.5%	1/10W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6054	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R6055	1-208-805-11	METAL CHIP	9.1K	0.5%	1/10W
R6056	1-217-625-00	METAL	0.05	10%	2W
R6057	1-215-477-00	METAL	220K	1%	1/4W
R6058	1-215-477-00	METAL	220K	1%	1/4W
R6059	1-215-477-00	METAL	220K	1%	1/4W
R6060	1-219-512-11	CARBON	2.2M	5%	1/2W
R6061	⚠1-220-886-61	FUSIBLE	0.1	10%	1W
R6062	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6062	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6065	1-219-512-11	CARBON	2.2M	5%	1/2W
R6067	1-249-397-11	CARBON	22	5%	1/4W
R6068	⚠1-205-998-11	CEMENTED	1	5%	10W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6069	⚠1-205-998-11	CEMENTED	1	5%	10W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6071	⚠1-240-881-11	CEMENTED	0.82	5%	10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6072	1-249-417-11	CARBON	1K	5%	1/4W
R6076	1-249-389-11	CARBON	4.7	5%	1/4W
R6077	1-216-689-11	RES-CHIP	39K	5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6078	1-216-073-00	RES-CHIP	10K	5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6079	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6100	1-260-298-51	CARBON	3.3	5%	1/2W
R6101	1-216-045-00	RES-CHIP	680	5%	1/10W
R6102	1-249-389-11	CARBON	4.7	5%	1/4W
R6103	1-216-009-91	RES-CHIP	22	5%	1/10W
R6104	1-240-205-11	CARBON	22M	5%	1/2W
R6105	1-216-097-91	RES-CHIP	100K	5%	1/10W
R6106	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6107	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6108	1-215-493-00	METAL	1M	1%	1/4W
R6109	1-216-025-91	RES-CHIP	100	5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6109	1-216-041-00	RES-CHIP	470	5%	1/10W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6300	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6301	1-249-413-11	CARBON	470	5%	1/4W
R6302	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6304	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6305	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6306	1-216-041-00	RES-CHIP	470	5%	1/10W
R6307	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6308	1-216-049-91	RES-CHIP	1K	5%	1/10W
R6309	1-249-417-11	CARBON	1K	5%	1/4W
R6310	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6311	1-215-477-00	METAL	220K	1%	1/4W
R6312	1-249-417-11	CARBON	1K	5%	1/4W
R6313	1-216-097-91	RES-CHIP	100K	5%	1/10W
R6314	1-216-385-11	METAL OXIDE	0.47	5%	3W
R6316	1-215-477-00	METAL	220K	1%	1/4W
R6317	1-249-417-11	CARBON	1K	5%	1/4W
R6318	1-215-453-00	METAL	22K	1%	1/4W
R6319	1-215-476-00	METAL	200K	1%	1/4W
R6320	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R6321	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R6322	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6323	1-216-041-00	RES-CHIP	470	5%	1/10W
R6324	1-216-049-91	RES-CHIP	1K	5%	1/10W
R6325	1-208-819-11	METAL CHIP	36K	0.5%	1/10W
R6326	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R6327	1-208-782-11	METAL CHIP	1K	0.5%	1/10W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6328	1-216-065-91	RES-CHIP	4.7K	5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6328	1-215-906-11	METAL OXIDE	15	5%	3W (ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6329	1-216-041-00	RES-CHIP	470	5%	1/10W (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)

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G1, G

REF.NO.	PART NO.	DESCRIPTION	REMARK
R6329	1-208-807-11	METAL CHIP 11K 0.5% 1/10W	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6330	1-208-813-11	METAL CHIP 20K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6332	1-208-819-11	METAL CHIP 36K 0.5% 1/10W	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
R6333	1-208-806-11	METAL CHIP 10K 0.5% 1/10W	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6334	1-216-041-00	RES-CHIP 470 5% 1/10W	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6335	1-216-071-00	RES-CHIP 8.2K 5% 1/10W	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
R6336	1-208-802-11	METAL CHIP 6.8K 0.5% 1/10W	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
		<RELAY>	
RY6000	⚠1-755-357-11	RELAY, AC POWER	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
RY6000	⚠1-755-352-11	RELAY, AC POWER	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
RY6001	⚠1-755-357-11	RELAY, AC POWER	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
		<TRANSFORMER>	
T6001	⚠1-431-493-11	TRANSFORMER, LINE FILTER	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
T6001	⚠1-424-505-11	TRANSFORMER, LINE FILTER	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
T6002	⚠1-431-493-11	TRANSFORMER, LINE FILTER	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
T6002	⚠1-424-505-11	TRANSFORMER, LINE FILTER	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
T6003	⚠1-431-445-11	TRANSFORMER, CONVERTER (PFT)	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
T6004	⚠1-435-443-11	TRANSFORMER, CONVERTER (PIT)	
T6005	⚠1-435-445-11	TRANSFORMER, CONVERTER (PIT)	
T6100	⚠1-435-444-11	TRANSFORMER, STAND-BY	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
T6100	⚠1-433-844-11	TRANSFORMER, CONVERTER	(ES43HK1/SN1, ES48HK1/SN1, ES53HK1/SN1, ES61HK1/SN1)
		<THERMISTOR>	
TH6100	1-803-586-11	THERMISTOR, NTC	
		<VARISTOR>	
VD6000	1-803-614-11	VARISTOR	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
VD6001	⚠1-803-830-51	VARISTOR (ERZV14D621)	
VD6002	⚠1-803-830-51	VARISTOR (ERZV14D621)	
		MISCELLANEOUS	
	⚠1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE)	(FOCUS PACK)
	⚠1-452-790-41	NECK ASSY (NA-295)	
	1-528-864-11	BATTERY, SOLAR	
	1-529-403-11	SPEAKER (6.6 CM) (ES48, ES53)	
	1-529-405-11	SPEAKER (13 CM) (ES53)	
	1-529-643-11	SPEAKER (13 CM) (ES48)	
	1-529-757-11	SPEAKER (2.7 CM) (ES61)	
	1-529-758-11	SPEAKER (8 CM) (ES61)	
	1-529-759-11	SPEAKER (16 CM) (ES61)	
	1-529-791-11	SPEAKER (10 CM) (ES43)	
	1-529-792-11	SPEAKER (12 CM) (ES43)	
	1-543-982-11	CORE, FERRITE	
	⚠1-574-062-52	CORD, POWER (WITH CONNECTOR)	(ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)
	*1-761-348-11	PWB, MOUNTED (NET WORK) (ES43)	
	1-790-082-11	CABLE, RF	
	⚠1-792-002-11	CORD, POWER (WITH FILTER)	(ES43HK1, ES48HK1, ES53HK1, ES61HK1)
	⚠1-792-035-11	CORD, POWER (WITH FILTER)	(ES43SN1, ES48SN1, ES53SN1, ES61SN1)
	⚠8-598-955-12	BLOCK ASSY, HIGH-VOLTAGE	
	⚠8-733-570-15	PICTURE TUBE 07MXC2 (G) (HEATER)	
	⚠8-733-571-15	PICTURE TUBE 07MXC2 (R) (HEATER)	(ES43)
	⚠8-733-572-15	PICTURE TUBE 07MXC3 (R) (HEATER)	(ES48, ES53)
	⚠8-733-573-15	PICTURE TUBE 07MXC4 (R) (HEATER)	(ES61)
	⚠8-733-574-15	PICTURE TUBE 07MAC2 (B) (HEATER)	(ES43)
	⚠8-733-575-15	PICTURE TUBE 07MAC3 (B) (HEATER)	(ES48, ES53)
	⚠8-733-576-15	PICTURE TUBE 07MAC4 (B) (HEATER)	(ES61)

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REF.NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	⚠1-569-008-11	ADAPTOR, CONVERSION 2P (ES43ME1/MN1, ES48ME1/MN1, ES53ME1/MN1, ES61ME1/MN1)	
	*4-029-168-01	BAG, PROTECTION (ES43)	
	*4-030-895-01	JOINT	
	*4-041-423-11	SHEET, PROTECTION (ES43, ES48)	
	*4-055-672-01	BAG, PROTECTION (ES53)	
	*4-055-673-01	SHEET, PROTECTION (ES53,ES61)	
	*4-059-461-01	BAG, PROTECTION (ES61)	
	*4-060-976-01	BAG, PROTECTION (ES48)	
	*4-069-899-01	TRAY(ES48)	
	*4-069-900-02	BOARD, TOP (ES48)	
	*4-069-901-01	BOARD, BOTTOM (ES48)	
	*4-069-994-01	TRAY(ES53)	
	*4-069-995-01	BOARD, TOP (ES53)	
	*4-069-996-01	BOARD, BOTTOM (ES53)	
	*4-071-930-01	TRAY(ES61)	
	*4-071-931-01	BOARD, TOP (ES61)	
	*4-071-932-01	BOARD, BOTTOM (ES61)	
	*4-071-933-01	CUSHION (UPPER) (ASSY) (ES61)	
	*4-071-934-01	CUSHION (LOWER) (ASSY) (ES61)	
	*4-076-536-01	TRAY(ES43)	
	*4-076-537-01	INDIVIDUAL CARTON (ES43)	
	*4-076-538-01	CUSHION (UPPER) (ASSY) (ES43)	
	*4-076-539-01	CUSHION (LOWER) (ASSY) (ES43)	
	4-076-694-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, CHINESE, PERUSSIAN, ARABIC)	
	*4-076-803-01	INDIVIDUAL CARTON (ES48)	
	*4-076-804-01	CUSHION (UPPER) (ASSY) (ES48)	
	*4-076-805-01	CUSHION (LOWER) (ASSY) (ES48)	
	*4-077-770-01	INDIVIDUAL CARTON (ES53)	
	*4-077-771-01	CUSHION (UPPER) (ASSY) (ES53)	
	*4-077-772-01	CUSHION (LOWER) (ASSY) (ES53)	
	*4-077-862-01	INDIVIDUAL CARTON (ES61)	
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		REMOTE COMMANDER	
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	1-476-170-11	REMOTE COMMANDER (RM-961)	
	4-978-977-01	COVER, BATTERY (for RM-961)	

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